

**Supplementary Table 1.** The effect of oral iron versus IV plus oral iron on individual modified SF-36 physical scales, and the separate effect of iron status measured during and at the end of pregnancy on those individual modified SF-36 physical scales

	Oral iron only Mean <sup>1</sup> ± SD	IV plus oral iron Mean <sup>1</sup> ± SD	Comparison					
			Coefficient <sup>1</sup>	95% CI	P-value	OR <sup>2</sup>	95% CI	P-value
<b>Physical functioning<sup>4</sup> (PF)</b>								
Pre-trial	48.7 ± 39.5	42.1 ± 40.1	-6.6	(-16.6 to 3.3)	0.19	0.67	(0.33 to 1.35)	0.26
4 weeks	70.6 ± 33.2	72.1 ± 33.0	1.5	(8.9 to 21.7)	0.77	1.65	(0.91 to 2.99)	0.10
Delivery	81.0 ± 26.3	78.5 ± 33.2	-2.6	(17.2 to 34.2)	>0.90	1.31	(0.57 to 3.02)	0.53
Later	87.7 ± 31.6	83.1 ± 36.5	-4.6	(23.1 to 41.6)	0.36	1.16	(0.43 to 3.12)	0.77
<b>Haemoglobin<sup>3</sup></b>								
QoL during pregnancy			11.9	(8.8 to 14.9)	<0.001	1.97	(1.58 to 2.46)	<0.001
Predicting post-delivery QoL			9.8	(6.9 to 12.7)	<0.001	1.54	(1.27 to 1.89)	<0.001
<b>Role physical<sup>4</sup> (RP)</b>								
Pre-trial	50.3 ± 28.4	51.1 ± 25.0	0.8	(-7.3 to 8.9)	0.85	1.13	(0.63 to 2.04)	0.68
4 weeks	60.0 ± 18.9	65.0 ± 24.6	5.0	(4.4 to 16.6)	0.22	1.27	(0.74 to 2.18)	0.39
Delivery	67.0 ± 22.2	66.0 ± 35.6	-1.0	(10.2 to 24.9)	0.80	0.94	(0.42 to 2.11)	0.89
Later	72.7 ± 27.7	72.2 ± 32.5	-0.5	(15.6 to 30.9)	>0.90	1.04	(0.40 to 2.67)	>0.90
<b>Haemoglobin<sup>3</sup></b>								
QoL during pregnancy			3.4	(1.3 to 5.6)	0.002	1.58	(1.26 to 1.97)	<0.001
Predicting post-delivery QoL			5.0	(2.7 to 7.4)	<0.001	1.50	(1.22 to 1.86)	<0.001
<b>General health<sup>4</sup> (GH)</b>								
Pre-trial	33.4 ± 79.8	30.4 ± 95.2	-3.0	(-11.6 to 5.6)	0.50	0.80	(0.41 to 1.56)	0.51
4 weeks	51.0 ± 104	63.2 ± 67.9	12.1	(8.1 to 21.2)	0.031	3.14	(1.57 to 6.26)	0.001
Delivery	49.0 ± 81.8	53.1 ± 74.9	4.0	(4.6 to 20.7)	>0.90	1.75	(0.76 to 4.02)	0.19
Later	52.3 ± 94.2	54.9 ± 95.5	2.6	(8.5 to 23.3)	>0.90	1.80	(0.74 to 4.40)	0.20
<b>Ferritin<sup>3</sup></b>								
QoL during pregnancy			10.0	(7.2 to 12.7)	<0.001	1.80	(1.47 to 2.20)	<0.001

Predicting post-delivery QoL	7.1	(2.8 to 11.3)	0.001	1.59	(1.19 to 2.14)	0.002
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- <sup>1</sup> Mean (standard deviation) QoL scores in the two study groups at four different time periods and difference (coefficient; 95% confidence intervals; P-values) between study groups at those time points were estimated by generalized estimating equations adjusted for mode of delivery and duration of breast feeding (log.-transformed) and corrected for multiple comparisons by the Holm method.
- <sup>2</sup> Comparison of QoL scores in the two study groups at four different time periods with rank-order assumptions were estimated using repeated-measures ordered logistic regression adjusted and corrected as above<sup>1</sup>, expressed as odds ratio (OR; 95% confidence intervals; P-values).
- <sup>3</sup> The association between iron status and QoL scores were examined separately using: 1) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy; 2) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy, including the association of QoL at time of interview (“Later”) and the iron status at delivery. The coefficients shown were the effect of a rise of 1 standard deviation of haemoglobin (mean 118 g/L SD 10.9) or ferritin (log.<sub>10</sub>-transformed mean 1.54 SD 0.56) on the QoL score being examined.
- <sup>4</sup> The multivariate effect size estimates were adjusted for covariates selected by stepwise regression from maternal age (z-score), haemoglobin (z-score), ferritin (z-score), Socio-Economic Indexes for Areas (SEIFA; based on the Collector District of residence of mothers) (z-score), quality of sleep, use and duration of breast-feeding (z-score of log.-transformation), hospitalization of baby, baby gender and mode of delivery (including intervention group interactions): 1) PF covariates were mode of delivery and duration of breast feeding (log.-transformed); 2) RP covariates were mode of delivery only; 3) GH covariates were SEIFA, quality of sleep, use only of breast-feeding, hospitalization of baby and mode of delivery. Z-scores were the standardized normal transformation of the continuous values ( $\{\text{subject value minus mean}\}/\text{SD}$ ).

**Supplementary Table 2.** The effect of oral iron versus IV plus oral iron on individual modified SF-36 mental scales, and the separate effect of iron status measured during and at the end of pregnancy on those individual modified SF-36 mental scales

	Oral iron only Mean <sup>1</sup> ± SD	IV plus oral iron Mean <sup>1</sup> ± SD	Comparison					
			Coefficient <sup>1</sup>	95%CI	P-value	OR <sup>2</sup>	95% CI	P-value
Vitality <sup>4</sup> (VT)								
Pre-trial	31.4 ± 79.5	33.0 ± 62.1	1.6	(-6.8 to 9.9)	0.71	1.18	(0.62 to 2.26)	0.62
4 weeks	54.6 ± 71.0	60.0 ± 63.2	5.5	(17.7 to 31.8)	0.60	1.27	(0.61 to 2.66)	0.52
Delivery	58.7 ± 59.6	58.5 ± 75.2	-0.3	(21.0 to 36.8)	>0.90	0.89	(0.39 to 2.08)	0.80
Later	61.9 ± 72.5	61.3 ± 88.3	-0.6	(24.3 to 39.8)	0.89	0.88	(0.33 to 2.33)	0.79
Ferritin <sup>3</sup>								
QoL during pregnancy			10.0	(7.3 to 12.8)	<0.001	2.09	(1.66 to 2.62)	<0.001
Predicting post-delivery QoL			3.3	(-0.7 to 7.3)	0.11	1.39	(0.98 to 1.98)	0.06
Social functioning <sup>4</sup> (SF)								
Pre-trial	57.2 ± 119	61.0 ± 70.3	3.8	(-5.6 to 13.3)	0.43	1.12	(0.53 to 2.39)	0.76
4 weeks	67.1 ± 96.1	70.7 ± 63.3	3.6	(9.7 to 17.7)	0.91	1.10	(0.69 to 1.76)	0.69
Delivery	62.7 ± 90.4	69.8 ± 63.7	7.1	(2.5 to 16.2)	0.29	1.29	(0.62 to 2.67)	0.49
Later	73.5 ± 94.2	71.1 ± 66.3	-2.4	(12.1 to 28.2)	0.62	0.65	(0.26 to 1.63)	0.36
Haemoglobin <sup>3</sup>								
QoL during pregnancy			4.4	(2.2 to 6.6)	<0.001	1.26	(1.04 to 1.54)	0.020
Predicting post-delivery QoL			3.5	(1.8 to 5.1)	<0.001	1.21	(0.96 to 1.53)	0.11
Role emotional <sup>4</sup> (RE)								
Pre-trial	64.1 ± 61.5	63.2 ± 63.6	-0.9	(-8.2 to 6.4)	0.81	0.96	(0.50 to 1.83)	0.90
4 weeks	69.4 ± 60.8	70.2 ± 63.7	0.8	(0.8 to 8.1)	>0.90	1.19	(0.82 to 1.71)	0.36
Delivery	67.4 ± 76.2	69.4 ± 50.2	2.0	(-2.0 to 6.9)	0.60	1.23	(0.70 to 2.18)	0.47
Later	74.0 ± 54.3	74.5 ± 70.8	0.4	(4.0 to 14.1)	>0.90	1.46	(0.68 to 3.12)	0.33
Haemoglobin <sup>3</sup>								
QoL during pregnancy			3.1	(1.7 to 4.5)	<0.001	1.31	(1.09 to 1.56)	0.003

Predicting post-delivery QoL			2.8	(1.3 to 4.3)	<0.001	1.33	(1.08 to 1.64)	0.007
Mental health <sup>4</sup> (MH)								
Pre-trial	56.9 ± 12.5	58.8 ± 12.4	1.8	(-2.3 to 5.9)	>0.90	1.44	(0.72 to 2.90)	>0.90
4 weeks	54.3 ± 12.0	58.1 ± 12.1	3.9	(-3.0 to 1.4)	0.32	1.31	(0.83 to 2.07)	0.25
Delivery	54.7 ± 15.0	57.9 ± 14.1	3.2	(-3.7 to 3.0)	0.53	1.09	(0.47 to 2.51)	0.84
Later	55.8 ± 14.8	55.3 ± 12.6	-0.4	(-2.0 to 3.4)	0.83	0.65	(0.32 to 1.30)	0.22
Haemoglobin <sup>3</sup>								
QoL during pregnancy			-0.1	(-1.1 to 0.9)	0.84	1.02	(0.84 to 1.25)	0.82
Predicting post-delivery QoL			-0.6	(-1.5 to 0.2)	0.14	0.98	(0.79 to 1.22)	0.86

<sup>1</sup> Mean (standard deviation) QoL scores in the two study groups at four different time periods and difference (coefficient; 95% confidence intervals; P-values) between study groups at those time points were estimated by generalized estimating equations adjusted for mode of delivery and duration of breast feeding (log.-transformed) and corrected for multiple comparisons by the Holm method.

<sup>2</sup> Comparison of QoL scores in the two study groups at four different time periods with rank-order assumptions were estimated using repeated-measures ordered logistic regression adjusted and corrected as above<sup>1</sup>, expressed as odds ratio (OR; 95% confidence intervals; P-values).

<sup>3</sup> The association between iron status and QoL scores were examined separately using: 1) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy; 2) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy, including the association of QoL at time of interview (“Later”) and the iron status at delivery.

<sup>4</sup> The multivariate effect size estimates were adjusted for covariates selected by stepwise regression from maternal age (z-score), haemoglobin (z-score), ferritin (z-score), Socio-Economic Indexes for Areas (SEIFA; based on the Collector District of residence of mothers) (z-score), quality of sleep, use and duration of breast-feeding (z-score of log.-transformation), hospitalization of baby, baby gender and mode of delivery (including intervention group interactions with each of these covariates): 1) VT covariates were mode of delivery and quality of sleep; 2) SF covariates were mode of delivery, quality of sleep and male baby; 3) GH covariates were age of mother, quality of sleep, hospitalization of baby, male baby and mode of delivery; 4) MH covariates were mode of delivery only. Z-scores were the standardized normal transformation of the continuous values ( $\frac{\text{subject value} - \text{mean}}{\text{SD}}$ ).

**Supplementary Table 3.** The effect of oral iron versus IV plus oral iron on the aggregate modified SF-36 scales, and the separate effect of iron status measured during and at the end of pregnancy on those aggregate modified SF-36 scales.

	Oral iron only Mean <sup>1</sup> ± SD	IV plus oral iron Mean <sup>1</sup> ± SD	Comparison					
			Coefficient <sup>1</sup>	95%CI	P-value	OR <sup>2</sup>	95% CI	P-value
<b>Physical Components Score<sup>4</sup> (PCS)</b>								
Pre-trial	43.8 ± 31.2	38.9 ± 54.5	-4.9	(-11.9 to 2.0)	0.17	0.64	(0.34 to 1.21)	0.17
4 weeks	59.6 ± 47.5	65.0 ± 46.9	5.3	(5.9 to 15.9)	0.27	2.39	(1.32 to 4.32)	0.004
Delivery	64.6 ± 56.5	63.9 ± 35.5	-0.6	(9.7 to 21.9)	>0.90	1.60	(0.75 to 3.40)	0.22
Later	69.6 ± 50.6	68.2 ± 54.0	-1.3	(14.4 to 27.2)	0.71	1.51	(0.62 to 3.67)	0.36
<b>Haemoglobin<sup>3</sup></b>								
QoL during pregnancy			7.3	(5.1 to 9.6)	<0.001	1.99	(1.63 to 2.44)	<0.001
Predicting post-delivery QoL			8.2	(6.0 to 10.5)	<0.001	1.75	(1.46 to 2.10)	<0.001
<b>Mental Components Score<sup>4</sup> (PCS)</b>								
Pre-trial	52.6 ± 51.0	54.0 ± 36.7	1.4	(-3.5 to 6.2)	0.58	1.11	(0.62 to 2.00)	0.72
4 weeks	61.7 ± 51.3	64.8 ± 37.8	3.1	(7.5 to 13.2)	0.63	1.24	(0.77 to 2.01)	0.38
Delivery	61.2 ± 44.7	64.0 ± 33.2	2.7	(6.4 to 13.6)	0.56	1.12	(0.58 to 2.19)	0.73
Later	66.6 ± 47.5	65.6 ± 44.9	-1.0	(11.5 to 19.2)	0.67	0.81	(0.34 to 1.90)	0.63
<b>Haemoglobin<sup>3</sup></b>								
QoL during pregnancy			3.8	(2.5 to 5.0)	<0.001	1.71	(1.39 to 2.10)	<0.001
Predicting post-delivery QoL			4.1	(2.8 to 5.3)	<0.001	1.54	(1.24 to 1.92)	<0.001
<b>Modified SF-36<sup>4</sup></b>								
Pre-trial	48.5 ± 49.2	47.7 ± 33.2	-0.7	(-5.8 to 4.4)	0.77	0.99	(0.52 to 1.86)	>0.90
4 weeks	60.4 ± 44.2	65.3 ± 36.8	5.0	(7.8 to 14.5)	0.17	1.72	(1.00 to 2.95)	0.05
Delivery	62.2 ± 38.3	64.8 ± 44.5	2.6	(9.1 to 17.0)	0.32	1.34	(0.67 to 2.69)	0.41
Later	67.8 ± 43.0	67.2 ± 48.3	-0.6	(14.3 to 22.8)	0.83	0.98	(0.40 to 2.39)	>0.90

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Haemoglobin<sup>3</sup>

QoL during pregnancy	5.2	(3.8 to 6.7)	<0.001	2.09	(1.72 to 2.55)	<0.001
Predicting post-delivery QoL	5.9	(4.4 to 7.5)	<0.001	1.81	(1.46 to 2.25)	<0.001

- <sup>1</sup> Mean (standard deviation) QoL scores in the two study groups at four different time periods and difference (coefficient; 95% confidence intervals; P-values) between study groups at those time points were estimated by generalized estimating equations adjusted for mode of delivery and duration of breast feeding (log.-transformed) and corrected for multiple comparisons by the Holm method.
- <sup>2</sup> Comparison of QoL scores in the two study groups at four different time periods with rank-order assumptions were estimated using repeated-measures ordered logistic regression adjusted and corrected as above<sup>1</sup>, expressed as odds ratio (OR; 95% confidence intervals; P-values).
- <sup>3</sup> The association between iron status and QoL scores were examined separately using: 1) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy; 2) the QoL values during the pregnancy recalled at the time of interview, and the iron status measurements made at each time point during pregnancy, including the association of QoL at time of interview (“Later”) and the iron status at delivery.
- <sup>4</sup> The multivariate effect size estimates were adjusted for covariates selected by stepwise regression from maternal age (z-score), haemoglobin (z-score), ferritin (z-score), Socio-Economic Indexes for Areas (SEIFA; based on the Collector District of residence of mothers) (z-score), quality of sleep, use and duration of breast-feeding (z-score of log.-transformation), hospitalization of baby, baby gender and mode of delivery (including intervention group interactions with each of these covariates): 1) PCS covariates were use of breast feeding only; 2) MCS covariates were quality of sleep, male baby and mode of delivery; 3) modified SF-36 covariates were quality of sleep and mode of delivery. Z-scores were the standardized normal transformation of the continuous values ( $\{\text{subject value minus mean}\}/\text{SD}$ ).