Supplementary Materials

Improving coverage of antenatal iron and folic acid supplementation and malaria prophylaxis through targeted information and home deliveries in rural south-central Côte d'Ivoire: a cluster randomized controlled trial

Contents

Supplemental Materials Table ST1: Difference in follow-up rates across arms

	Baseline survey	Endline survey	Follow-up rate
	N	n	%
Control	249	231	92.8
INFO	258	242	93.8
INFO+DELIV	260	243	93.5
Total	767	716	93.4
F-test	F(2, 90) = 0.11, Prob > F = 0.8990		

Supplementary Materials Table ST2: Intervention impact on mean haemoglobin

	PANEL A: Unadjusted Impact Estimates
	Hemoglobin (grams per liter)
VARIABLES	Coeff (95%CI)
INFO	-0.001 (-2.45 - 2.45)
INFO+DELIV	1.67 (-1.08 - 4.42)
Control group	111.01** (109.17 - 112.86)
Observations	716
R-squared	0.003
	PANEL B: Adjusted Impact Estimates
INFO	-0.03 (-2.59 - 2.53)
INFO+DELIV	1.65 (-1.13 - 4.43)
Observations	716
R-squared	0.02

** if p-value <0.0125

Panel A shows unadjusted models that control for home delivery and information interventions fixed effects only. Panel B shows adjusted models that control for mother's and household's characteristics with clustering at the neighbourhood ("quartier") level. Coefficients reflect mean differences with 95% Cis in parentheses.

Supplementary Materials Table ST3: Intervention impact on mild, moderate and severe anaemia

	Mild anaemia	Moderate anaemia	Severe anaemia
VARIABLES	OR (95%CI)	OR (95%CI)	OR (95%CI)
PANEL A: Unadjusted Impact Estimates			
INFO	0.81 (0.51 - 1.29)	1.31 (0.80 - 2.15)	0.19 (0.02 - 1.75)
INFO+DELIV	0.76 (0.48 - 1.20)	0.97 (0.59 - 1.59)	0.38 (0.09 - 1.64)
Observations	716	716	716
PANEL B: Adjusted Impact Estimates			
INFO	0.84 (0.53 - 1.33)	1.27 (0.76 - 2.12)	0.17 (0.02 - 1.65)
INFO+DELIV	0.79 (0.50 - 1.25)	0.98 (0.60 - 1.61)	0.36 (0.09 - 1.41)
Observations	716	716	399

Notes: Figure shows estimated treatment impact on mild, moderate and severe anaemia. Mild anaemia was defined as haemoglobin concentration of 100-<110 g/L. Moderate anaemia was defined as haemoglobin concentration of 70-<100 g/l, and severe anaemia was defined as haemoglobin concentration less than 70 g/L. Panel A shows unadjusted models that control for home delivery and information interventions only. Panel B shows adjusted models that control for mother's and household's characteristics. All models allow for clustered standard errors at the neighbourhood ("quartier") level. Estimated coefficients are odds ratios with 95% CIs in parentheses.

Supplementary Materials Table ST4: Intervention impact on mean IFA supplements

	Mean number of IFA supplements	Adjusted Impact Estimates		
	Mean	β	P value	95% CI
Info	114.4	2.83	0.477	-4.98 - 10.63
Info +DELIV	160.6	49.02	0.000	41.30 - 56.73
Control	111.5	111.54	0.000	105.99 - 117.09

Supplementary Materials Table ST5: Intervention impact on anaemia and malaria using generalized linear models

	Anemia	Post-pregnancy parasitemia
VARIABLES	RR (95%CI)	RR (95%CI)
INFO	1.07 (0.82 - 1.39)	1.05 (0.46 - 2.40)
INFO+DELIV	0.86 (0.66 - 1.14)	0.18** (0.04 - 0.79)
Observations	716	716

** if p-value <0.0125

Notes: Figure shows estimated treatment impact on anemia and malaria parasitaemia from adjusted Generalized linear models for mother's and household's characteristics as well as ownership and use of insecticide treated bed nets, type of delivery, distance from health facility. Estimated coefficients are shown as prevalence ratios with 95% confidence intervals in parentheses. Standard errors are clustered at the village/quartier level.

Supplementary Materials Table ST6: Intervention impact on ANC attendance, IFA and SP compliance

VARIABLES	Any ANC RR (95%CI)	≥ 4 ANC visits RR (95%CI)	IFA full compliance RR (95%CI)	≥ 3 doses of SP RR (95%CI)
INFO	0.98 (0.82 - 1.18)	1.06 (0.78 - 1.44)	2.10 (0.78 - 5.66)	1.02 (0.80 - 1.29)
INFO+DELIV	0.99 (0.83 - 1.19)	1.32** (0.99 - 1.76)	7.76** (3.27 - 18.43)	1.59** (1.28 - 1.97)
Observations	716	716	716	716

** p<0.0125.

Notes: Figure shows estimated treatment impact on ANC attendance and IFA and SP compliance from adjusted generalized linear models for mother's and household's characteristics as well as ownership and use of insecticide treated bed nets, type of delivery, and distance from health facility. Estimated coefficients are shown as prevalence ratios with 95% confidence intervals in parentheses. Standard errors are clustered at the village/quartier level.

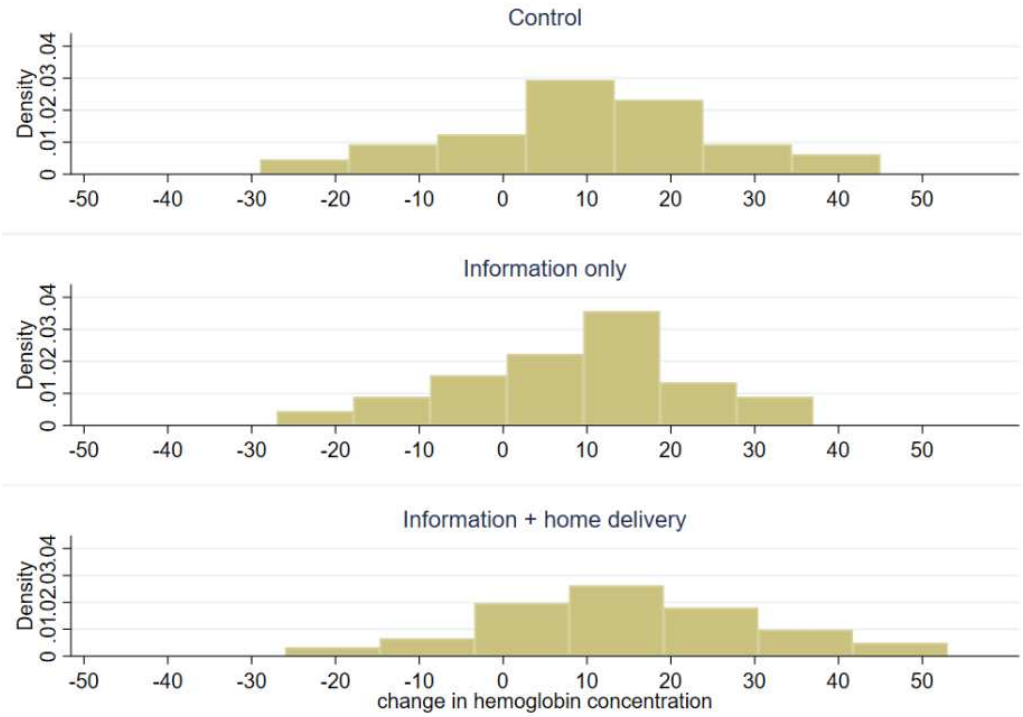
Supplementary Materials Table ST7: Intervention impact on miscarriage, stillbirth, birthweight and low birthweight

VARIABLES	Miscarriage RR (95%CI)	Stillbirth RR (95%CI)	Birth weight Coeff (95%CI)	Low birth weight RR (95%CI)
INFO	1.15 (0.46 - 2.85)	0.63 (0.26 - 1.58)	14.00 (-98.69 - 126.68)	0.61 (0.32 - 1.14)
INFO+DELIV	0.54 (0.18 - 1.58)	0.42** (0.16 - 1.13)	5.64 (-136.04 - 147.32)	0.73 (0.39 - 1.36)
Observations	716	716	557	557
R-squared			0.06	

** p<0.0125

Miscarriage, stillbirth and low birth weight estimates are based on Generalized linear models regressions. Birthweight estimates are based on linear regressions with clustering at the study cluster (N=82) level. Estimated coefficients are prevalence ratios with 95% Confidence intervals (CIs) in parentheses. All estimates are adjusted for mother's and household's characteristics as well as ownership and use of insecticide treated bed nets, type of delivery, distance from health facility. Standard errors are clustered at the village/quartier level.

Supplemental Materials Figure SF1: Change in haemoglobin concentration between baseline and endline by study arm



Notes: Figure shows empirical distribution of changes in haemoglobin concentrations between baseline and endline in g/l (x-axis).

Supplemental Materials Figure SF2: Sulfadoxine-Pyrimethamine used for malaria prophylaxis

Supplemental Materials Figure SF3: Ferric hydroxide polymaltose acid used

Supplemental Materials Figure SF4: HRP2-based rapid diagnostic test used to test malaria parasitaemia