

## Supplementary Tables

Table S1: PCMC questions

<p>Now I am going to ask some questions about your interactions with patients.  It is understood that in clinical work, there are many demands and constraints that providers face that affect our interactions with patients.  Thinking of your interactions with your patients in the last month....</p>	
1. Do you introduce yourself to patients when you first see them? (If they just say yes, ask will you say this was a few times, most of the time, or all the time)	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
2. Do you call patients by their name when talking to them? For example: asked a patient, how are you Monica? Not when you have their folder and calling them to be seen	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
3. Do you explain to patients the purpose of examinations or procedures before proceeding?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
4. Do you explain to patients why they are being given some medication?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
5. Do you ask patients if they have any questions?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
6. Do you allow women to have a birth companion of their choice?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
7. Do you allow women to give birth in which ever delivery position they prefer?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
8. Other providers have stated that sometimes women behave in a way that make them react strongly to the situation. Sometimes this is spontaneous. Other times we think we need to do something to save or protect the baby  In the last month, have you shouted at, scolded, or threatened a woman for any reason?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always
9. In the last month, have you pinched, hit, or physically restrained a woman for any reason?	0, 0 No, never 1, 1 Yes, a few times 2, 2 Yes, most of the time 3, 3 Yes, always

**Table S2: Health facility level characteristics of the study population in each country**

Characteristics	Category	Country		P
		Kenya (N=25)	Ghana (N=18)	
Facility type	Govt. Hospital	10 (40.0)	8 (44.4)	0.69
	Govt. Health Center	11 (44.0)	9 (50.0)	
	Mission/Private Hospital	4 (16.0)	1 (5.6)	
Doctors/clinical officers available to work in the maternity unit	Median (range)	0 (0,3)	0(0,4)	0.18
Nurses or midwives available to work in the maternity unit	Median (range)	7 (1,15)	9 (3,34)	0.064
Auxiliary staff working on the maternity ward	Median (range)	2 (1,5)	1.5 (0,21)	0.27
Clinical providers (i.e., doctors, clinical officers, nurses/midwives) on duty during the day	Median (range)	2 (1,5)	3.5 (1,18)	<0.001
Clinical providers on duty at night	Median (range)	1 (0,3)	3 (1,5)	0.0050
Total deliveries for the last year	Median (range)	441 (105,4800)	398 (68,3379)	0.69
Are cesarian sections performed in this facility	No, never	21 (84.0)	10 (33.6)	0.23
	Yes, sometimes	1 (4.0)	2 (11.1)	
	Yes, most of the time	1 (4.0)	2 (11.1)	
	Yes, always	2 (8.0)	4 (22.2)	
Facility has magnesium sulphate	No, never	0 (0.0)	1 (5.6)	0.22
	Yes, sometimes	3 (12.0)	4 (22.2)	
	Yes, most of the time	12 (48.0)	4 (22.2)	
	Yes, always	10 (40.0)	9 (50.0)	
Facility has Intravenous fluids	No, never	0 (0.0)	0 (0.0)	0.17
	Yes, sometimes	5 (20.0)	0 (0.0)	
	Yes, most of the time	8 (32.0)	7 (38.9)	
	Yes, always	12 (48.0)	11 (61.1)	
Facility has blood for transfusion	No, never	13 (52.0)	9 (50.0)	0.0010
	Yes, sometimes	8 (32.0)	1 (5.6)	
	Yes, most of the time	4 (16.0)	1 (5.6)	
	Yes, always	0 (0.0)	7 (38.8)	
Facility has antibiotics	No, never	0 (0.0)	0 (0.0)	0.78
	Yes, sometimes	5 (20.8)	2 (11.1)	
	Yes, most of the time	9 (37.5)	7 (38.9)	
	Yes, always	10 (41.7)	9 (50.0)	
Facility has uterotonics	No, never	2 (8.3)	1 (5.6)	1.0
	Yes, sometimes	2 (8.3)	1 (5.6)	
	Yes, most of the time	9 (37.5)	7 (38.9)	
	Yes, always	11 (45.8)	9 (50.0)	
Are supplies for conducting deliveries such as gloves and cotton wool consistent	No, never	2 (8.0)	0 (0.0)	0.15
	Yes, sometimes	7 (28.0)	1 (5.6)	
	Yes, most of the time	7 (28.0)	8 (44.4)	
	Yes, always	9 (36.0)	9 (50.0)	
Have consistent electricity	No, never	1 (4.0)	0 (0.0)	0.0050
	Yes, sometimes	9 (36.0)	0 (0.0)	
	Yes, most of the time	6 (24.0)	11 (61.1)	
	Yes, always	9 (36.0)	7 (38.9)	
Have consistent running water from a tap	No, never	5 (20.0)	0 (0.0)	0.085
	Yes, sometimes	8 (32.0)	3 (16.7)	
	Yes, most of the time	4 (16.0)	6 (33.3)	

	Yes, always	8 (32.0)	9 (50.0)	
Target population	Median (range)	528 (66,12787)	6676 (1204,31532)	<0.001
Number of women who attended ANC at least 4 times	Median (range)	281 (48-1117)	419 (98,1913)	0.030
Total number of admissions	Median (range)	588 (112,4800)	367 (68,5672)	1.0
Total number of deliveries	Median (range)	441 (105,4800)	398 (68,3379)	0.69
Number of fresh stillbirths	Median (range)	2 (0,91)	1 (0,50)	0.67
Number of macerated stillbirths	Median (range)	2 (0,84)	0 (0,69)	0.013
Number of preterm babies	Median (range)	15 (0,114)	2 (0,524)	0.95
Number of neonatal deaths	Median (range)	2 (0,14)	0(0,104)	0.88
Total number of maternal deaths	Median (range)	0 (0,14)	0 (0,8)	0.044
Number of referrals	Median (range)	41 (0-200)	54 (8,1292)	0.19

**Table S3: Distribution of PCMC items by country**

Characteristic	Category	Country	
		Kenya	Ghana
Do you introduce yourself to patients when you first see them?	No, never	21 (25.0)	15 (10.0)
	Yes, a few times	32 (38.1)	48 (32.0)
	Yes, most of the time	23 (27.4)	55 (36.7)
	Yes, always	8 (9.5)	32 (21.3)
Do you call patients by their name when talking to them?	No, never	3 (3.5)	2 (1.3)
	Yes, a few times	32 (37.2)	31 (20.8)
	Yes, most of the time	35 (40.7)	66 (44.3)
	Yes, always	16 (18.6)	50 (33.6)
Do you explain to patients the purpose of examinations or procedures?	No, never	3 (3.5)	0 (0.0)
	Yes, a few times	17 (20.0)	7 (4.7)
	Yes, most of the time	42 (49.4)	69 (46.0)
	Yes, always	23 (27.1)	74 (49.3)
Do you explain to patients why they are being given some medication?	No, never	4 (4.7)	3 (2.0)
	Yes, a few times	23 (27.1)	19 (12.7)
	Yes, most of the time	35 (41.2)	45 (30.0)
	Yes, always	23 (27.1)	83 (55.3)
Do you ask patients if they have any questions?	No, never	18 (21.2)	1 (0.7)
	Yes, a few times	26 (30.6)	39 (26.0)
	Yes, most of the time	27 (31.8)	50 (33.3)
	Yes, always	14 (16.4)	60 (40.0)
Do you allow women to have a birth companion of their choice?	No, never	4 (4.7)	3 (2.0)
	Yes, a few times	7 (8.2)	11 (7.4)
	Yes, most of the time	23 (27.1)	30 (20.1)
	Yes, always	51 (60.03)	105 (70.5)
Do you allow women to give birth in which ever delivery position they prefer?	No, never	33 (38.4)	46 (31.1)
	Yes, a few times	26 (30.2)	41 (27.7)
	Yes, most of the time	19 (22.1)	30 (20.3)
	Yes, always	8 (9.3)	31 (20.9)
In the last month, have you shouted at, scolded, or threatened a woman for any reason?	No, never	28 (32.9)	58 (38.7)
	Yes, a few times	36 (42.4)	89 (59.3)
	Yes, most of the time	20 (23.5)	3 (2.0)
	Yes, always	1 (1.2)	0 (0.0)
In the last month, have you pinched, hit, or physically restrained a woman	No, never	59 (68.6)	137 (91.3)
	Yes, a few times	26 (30.2)	13 (8.7)
	Yes, most of the time	1 (1.2)	0 (0.0)
	Yes, always	0 (0.0)	0 (0.0)

**Table S4: Bivariate analysis of PCMC score at different health facility level characteristics**

Characteristics	Category	PCMC score		p
		N	Median (range)	
Facility type	Govt. Hospital	16	57.1 (35.71,82.14)	0.24
	Govt. Health Center/Disp	22	60.7 (46.43,96.43)	
	Mission/Private Hospital	5	57.1 (48.21,78.57)	
Doctors available to work in the maternity unit			Rho=0.04	0.77
Nurses or midwives are available to work in the maternity unit			Rho=-0.16	0.30
Clinical providers available to work in the maternity unit			Rho=-0.42	0.0050
Auxiliary staff work on the maternity ward			Rho=-0.06	0.71
clinical providers (I.e., doctors, Cos, nurses/midwives) are on duty at day			Rho=0.40	0.0080
clinical providers (I.e., doctors, Cos, nurses/midwives) are on duty at night			Rho=0.07	0.67
Total deliveries for the last year			Rho=-0.15	0.35
Are cesarian sections performed in this facility	No, never	31	60.7 (35.71,96.43)	0.30
	Yes, sometimes	3	64.3 (39.29,67.86)	
	Yes, most of the time	3	50.0 (48.21,57.14)	
	Yes, always	6	67.9 (53.57,78.57)	
Facility has magnesium sulphate	No, never	1	60.7 (60.71,60.71)	0.41
	Yes, sometimes	7	76.3 (35.71,96.43)	
	Yes, most of the time	16	55.4 (39.29,82.14)	
	Yes, always	19	67.9 (45.92,92.86)	
Facility has Intravenous fluids	No, never	0		0.048
	Yes, sometimes	4	48.2 (35.71,64.29)	
	Yes, most of the time	15	57.1 (39.29,96.43)	
	Yes, always	24	67.9 (42.86,92.86)	
Facility has blood for transfusion	No, never	22	60.7 (42.86,96.43)	0.71
	Yes, sometimes	9	53.6 (35.71,92.86)	
	Yes, most of the time	5	57.1 (39.29,67.86)	
	Yes, always	7	67.9 (39.29,78.57)	
Facility has antibiotics	No, never	0		0.83
	Yes, sometimes	7	64.3 (35.71,92.86)	
	Yes, most of the time	16	60.5 (39.29,96.43)	
	Yes, always	19	67.9 (42.86,92.86)	
Facility has uterotonics	No, never	3	60.3 (42.86,60.71)	0.63
	Yes, sometimes	3	64.3 (50.00,67.86)	
	Yes, most of the time	16	57.1 (39.29,96.43)	
	Yes, always	20	67.9 (35.71-92.86)	
Are supplies for conducting deliveries such as gloves and cotton wool consistent	No, never	2	55.4 (46.43,64.29)	0.11
	Yes, sometimes	8	51.8 (35.71,67.86)	
	Yes, most of the time	16	66.1 (39.29,96.43)	
	Yes, always	17	67.9 (42.86,82.14)	
Have consistent electricity	No, never	1	42.9 (42.86,42.86)	0.22
	Yes, sometimes	8	51.8 (35.71,92.86)	
	Yes, most of the time	18	66.1 (39.29,96.43)	
	Yes, always	16	64.3 (48.21,92.86)	
Have consistent running water from a tap	No, never	6	48.2 (35.71,92.86)	0.23
	Yes, sometimes	10	60.5 (46.43,76.34)	
	Yes, most of the time	10	53.6 (39.29,96.43)	
	Yes, always	17	67.9 (45.92,92.86)	
Target population			Rho=0.10	0.51
Number of women who attended ANC at least 4 times			Rho=0.10	0.51
Total number of admissions			Rho=-0.09	0.56
Number of fresh stillbirths			Rho=-0.14	0.36
Number of macerated stillbirths			Rho=-0.16	0.29
Number of preterm babies			Rho=-0.23	0.14
Number of neonatal deaths			Rho=-0.226	0.16
Total number of maternal deaths			Rho=-0.08	0.60
Number of referrals			Rho=-0.003	0.98

**Table S5: Structural equation model for mediation by Burnout levels on PCMC score**

Characteristic	Category	Total effect	Direct effect	Indirect effect
Burnout level		-0.33 (-0.48,-0.18)	-0.33 (-0.48,-0.18)	
Perceived stress		-0.57 (-0.87,-0.26)	-0.24 (-0.56,0.09)	-0.33 (-0.50,-0.16)
Age		0.26 (0.02,0.49)	0.26 (0.02,0.49)	
Religion	Catholic			
	Seventh Day Adventist	-6.60 (-12.39,-0.80)	-6.60 (-12.39,-0.80)	
	Methodist/Presby/Anglican	-0.95 (-5.03,3.13)	-0.95 (-5.03,3.13)	
Health facility type	Govt. Hospital			
	Govt. Health Center/Disp	7.47 (3.45,11.49)	7.47 (3.45,11.49)	
	Mission/Private Hospital	5.30 (0.72,9.88)	5.30 (0.72,9.88)	
Training on how to help you deal with stress	No			
	Yes	4.15 (-0.16,8.45)	4.15 (-0.16,8.45)	
Number of providers during day		0.43 (0.01,0.84)	0.43 (0.01,0.84)	
Country	Kenya			
	Ghana	4.58 (-0.72,9.88)	4.58 (-0.72,9.88)	
Overall R-squared		0.41		

**Supplemental Figure 1: Screen Plot from Factor Analysis of 9 PCMC Items**