

THE LANCET

Global Health

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Arsenault C, Jordan K, Lee D, et al. Equity in antenatal care quality: an analysis of 91 national household surveys. *Lancet Glob Health* 2018; **6**: e1186–95.

Equity in antenatal care quality: an analysis of 91 national household surveys

Supplementary material

Appendix 1. Definitions of skilled antenatal care providers by country

Country	Survey type	Year	Skilled antenatal care providers
Afghanistan	DHS	2015	Doctors, nurses/midwives, and auxiliary nurse/midwives
Albania	DHS	2009	Obstetrician/gynecologist, family doctor, and nurse, midwife.
Algeria	MICS	2013	Médecin, Infirmière / Sage-femme
Argentina	MICS	2012	Médico, Enfermera, Técnica obstétrica / partera
Armenia	DHS	2010	Doctor, nurse, midwife, and feldsher.
Bangladesh	DHS	2014	Qualified doctor, nurse/midwife/paramedic, FWV, CSBA, and SACMO
Belarus	MICS	2012	Doctors, nurse/midwives, medical assistants
Belize	MICS	2011	Doctor, Nurse / Midwife, Auxiliary midwife
Benin	DHS	2012	Doctors, nurses, Midwives, Nursing Assistants and Midwife Assistants.
Bhutan	MICS	2010	Doctor, Nurse / Midwife, HA/BHW, Asst. Clinical Officer (ACO)
Bolivia	DHS	2008	Doctor, nurse, auxiliary nurse
Bosnia Herzegovina	MICS	2012	Doctor, Nurse / Midwife
Burkina Faso	DHS	2010	Doctors, nurses, midwives, midwives, and trained midwives / birth attendants.
Burundi	DHS	2010	Physicians, nurses and midwives are considered health providers.
Cambodia	DHS	2014	Doctor, nurse, and midwife
Cameroon	DHS	2011	Doctors, nurses, midwives and nurses
Central African Rep	MICS	2010	Médecin, Infirmière / Sage-femme, Sage-femme auxiliaire
Chad	DHS	2015	Doctor, Nurse / Midwife, Matron and Hospital / Health Center Officer (this is "trained birth attendant")
Colombia	DHS	2015	Doctor, Nurse
Comoros	DHS	2012	Doctors, nurses and midwives.
Congo	DHS	2012	Doctors, nurses and midwives.
Costa Rica	MICS	2011	Médico general/obstetra, Enfermera general, Comadrona auxiliar, Enfermera obstétrica
Cote d'Ivoire	DHS	2012	Doctors, nurses, midwives and midwives / nursing assistants.
Dem. Republic of the Congo	DHS	2014	Trained staff including doctors, nurses and birth attendants
Dominican Republic	DHS	2013	Gynecologist / obstetrician, general practitioner, physician of another specialty, physician with unknown specialty and nurse.
Egypt	DHS	2014	Doctor or nurse/midwife.
El Salvador	MICS	2014	Médico, enfermera, enfermera auxiliar
Ethiopia	DHS	2016	Doctors and nurses/midwives, health officers, and health extension workers
Gabon	DHS	2012	Physicians, midwives, nurses, and nurse assistants are considered here as trained providers for antenatal care.
Ghana	DHS	2014	Doctor, nurse/midwife, and community health officer/nurse
Guatemala	DHS	2015	Doctor or nurse.
Guinea	DHS	2012	Doctors, nurses, midwives and midwives / nursing assistants.
Guinea Bissau	MICS	2014	Médico Enfermeira/parreira
Guyana	DHS	2009	Doctor, nurse, midwife, auxiliary nurse/midwife, and medex.
Haiti	DHS	2012	Physicians, nurses, midwifery nurses and nurse assistants are considered here as trained providers.
Honduras	DHS	2012	Doctor, nurse and auxiliary nurse
India	DHS	2016	Doctor, anm/nurse/mid-wife/lhv
Indonesia	DHS	2012	Doctor, obstetrician, nurse, midwife, and village midwife.
Iraq	MICS	2011	Doctor public Doctor private Nurse / Midwife
Jamaica	MICS	2011	Doctor Nurse / Midwife Auxiliary midwife

Jordan	DHS	2012	Doctor, nurse, and midwife
Kazakhstan	MICS	2015	Doctor Nurse / Midwife Feldsher
Kenya	DHS	2014	Doctor, nurse, and midwife
Kosovo	MICS	2014	Doctor Nurse / Midwife Auxiliary midwife
Kyrgyzstan	DHS	2012	Doctor, nurse, and midwife and feldsher.
Laos	MICS	2012	Doctor Nurse / Midwife Auxiliary midwife
Lesotho	DHS	2014	Doctor, nurse, and midwife
Liberia	DHS	2013	Doctor, nurse, and midwife and physician's assistant
Macedonia	MICS	2011	Doctor Midwife Obstetrical nurse
Madagascar	DHS	2009	Doctor, nurse, medical assistant
Malawi	DHS	2016	Doctors, clinical officers, medical assistants, nurses, and midwives.
Maldives	DHS	2009	Gynecologist, doctor, nurse, midwife, and community/family health worker
Mali	DHS	2013	Doctors, nurses, midwives and matrons.
Mauritania	MICS	2011	Médecin, Sage-femme, Infirmière, Accoucheuse auxiliaire
Mexico	MICS	2015	Médico, Enfermera, Partera profesional técnica
Moldova	MICS	2012	Doctor Nurse / Midwife
Mongolia	MICS	2014	Auxiliary midwife, Gynecologist Physician, Family/ Soum doctor Midwife Nurse
Montenegro	MICS	2013	Doctor Nurse / Midwife Auxiliary midwife
Mozambique	DHS	2011	Qualified health care agent includes physician, nurse, midwife, and ward / midwife assistant
Namibia	DHS	2013	Doctor, nurse, and midwife
Nepal	DHS	2011	Doctor, nurse, and midwife
Niger	DHS	2012	Doctor, nurse, and midwife
Nigeria	DHS	2013	Doctor, nurse, midwife, and auxiliary nurse/midwife.
Pakistan	DHS	2013	Doctor, nurse, midwife, and lady health visitor.
Palestine	MICS	2014	Doctor Nurse / Midwife
Panama	MICS	2013	Médico, Enfermera, Auxiliar de Enfermera, Comadrona, Curandero/Hierbero, Médico Tradicional Indígena
Peru	DHS	2012	Doctor, nurse, and midwife
Philippines	DHS	2013	Doctor, nurse, and midwife
Rwanda	DHS	2015	Doctor, nurse, medical assistant, and midwife.
Saint Lucia	MICS	2012	Doctor Nurse / Midwife
Sao Tome	MICS	2014	Doctor, nurse midwife, nurse, and nurse practitioner (auxiliary)
Senegal	DHS	2016	Doctor, nurse, and midwife
Serbia	MICS	2014	Doctor Nurse / Midwife
Sierra Leone	DHS	2013	Doctor, nurse, midwife, and MCH Aide
South Sudan	MICS	2010	Doctor, Midwife, Nurse / Midwife
Sudan	MICS	2014	Doctor Nurse / Midwife, Trained Midwife, Medical Assistant
Suriname	MICS	2010	Doctor Nurse / Midwife Auxiliary midwife
Swaziland	DHS	2007	Doctor, nurse/midwife/ auxiliary midwife
Tajikistan	DHS	2012	Doctor, nurse, midwife, and feldsher.
Tanzania	DHS	2016	Doctor/assistant medical officer (AMO), clinical officer, assistant clinical officer, nurse/midwife, assistant nurse, and MCH aide
Thailand	MICS	2013	Doctor Nurse/midwife
Timor Leste	DHS	2010	Doctor, nurse, midwife, and assistant nurse
Togo	DHS	2014	Doctors, medical assistants, nurses, midwives and auxiliary midwives
Tunisia	MICS	2012	Médecin Infirmière / Sage-femme, Sage-femme auxiliaire
Turkmenistan	MICS	2016	Doctor Nurse / Midwife Feldsher

Uganda	DHS	2011	Doctor, nurse/midwife, and medical assistant/clinical officer
Ukraine	DHS	2007	Doctor, nurse, and midwife
Vietnam	MICS	2014	Doctor Nurse / Midwife
Yemen	DHS	2013	Doctor, nurse, midwife, and auxiliary nurse/midwife
Zambia	DHS	2014	Doctor, clinical officer, and nurse/midwife
Zimbabwe	DHS	2015	Doctors, nurses and nurse/midwives

Appendix 2. Surveys questions on blood pressure monitoring, urine and blood testing and counseling on pregnancy complications during antenatal care

DHS 5 and 6

- Did you see anyone for antenatal care for this pregnancy? (yes/no)
 - As part of your antenatal care during this pregnancy, were any of the following done at least once:
 - Was your blood pressure measured? (yes/no)
 - Did you give a urine sample? (yes/no)
 - Did you give a blood sample? (yes/no)

DHS 6

- During any of your antenatal care visits, were you told about the signs of pregnancy complications? (yes/no)
- Were you told where to go if you had any of these complications? (yes/no)

MICS

- Did you see anyone for antenatal care during your pregnancy with *(NAME)*? (yes/no)
 - As part of your antenatal care during this pregnancy, were any of the following done at least once:
 - Was your blood pressure measured? (yes/no)
 - Did you give a urine sample? (yes/no)
 - Did you give a blood sample? (yes/no)

Appendix 3. Antenatal care coverage and wealth-related inequalities in 91 low and middle-income countries

Country	Antenatal care coverage	95% CI		Slope index of inequality in antenatal care coverage	95% CI		Relative index inequality in antenatal care coverage	95% CI	
Afghanistan	0.59	0.58	0.59	0.32	0.28	0.35	1.75	1.62	1.87
Albania	0.97	0.96	0.98	0.09	0.05	0.14	1.11	1.05	1.16
Algeria	0.93	0.92	0.93	0.10	0.07	0.13	1.12	1.08	1.15
Argentina	0.98	0.98	0.99	0.03	0.01	0.05	1.03	1.01	1.05
Armenia	0.99	0.98	0.99	-0.01	-0.02	0.01	0.99	0.98	1.01
Bangladesh	0.65	0.64	0.67	0.61	0.56	0.65	2.99	2.61	3.38
Belarus	1.00	0.99	1.00	0.03	-0.03	0.10	1.04	0.96	1.11
Belize	0.96	0.95	0.98	0.02	-0.03	0.07	1.02	0.97	1.07
Benin	0.86	0.85	0.87	0.38	0.35	0.40	1.62	1.55	1.69
Bhutan	0.97	0.97	0.98	0.06	0.03	0.09	1.06	1.03	1.10
Bolivia	0.90	0.89	0.91	0.25	0.22	0.29	1.35	1.28	1.41
Bosnia Herzegovina	0.87	0.84	0.89	0.01	-0.11	0.13	1.01	0.87	1.15
Burkina Faso	0.95	0.95	0.96	0.12	0.10	0.14	1.13	1.11	1.16
Burundi	0.99	0.99	0.99	0.01	-0.01	0.02	1.01	0.99	1.02
Cambodia	0.95	0.95	0.96	0.13	0.10	0.16	1.15	1.12	1.19
Cameroon	0.85	0.84	0.86	0.54	0.50	0.57	2.17	2.01	2.34
Central African Rep	0.68	0.66	0.69	0.46	0.41	0.51	2.05	1.86	2.25
Chad	0.64	0.63	0.65	0.22	0.18	0.25	1.41	1.33	1.49
Colombia	0.97	0.97	0.98	0.13	0.10	0.16	1.15	1.11	1.19
Comoros	0.92	0.91	0.94	0.11	0.06	0.16	1.13	1.06	1.20
Congo	0.93	0.92	0.93	0.22	0.19	0.25	1.29	1.24	1.33
Costa Rica	0.98	0.97	0.99	0.05	0.00	0.10	1.05	1.00	1.11
Cote d'Ivoire	0.91	0.90	0.92	0.23	0.20	0.27	1.31	1.25	1.38
Dem. Republic of the Congo	0.89	0.88	0.89	0.22	0.19	0.24	1.29	1.24	1.33
Dominican Republic	0.99	0.99	1.00	0.04	0.00	0.07	1.04	1.00	1.07
Egypt	0.90	0.90	0.91	0.15	0.13	0.17	1.18	1.15	1.22
El Salvador	0.96	0.95	0.97	0.07	0.05	0.10	1.08	1.05	1.11
Ethiopia	0.62	0.61	0.63	0.41	0.36	0.46	2.02	1.82	2.21
Gabon	0.96	0.95	0.97	0.16	0.12	0.21	1.20	1.14	1.26
Ghana	0.97	0.97	0.98	0.09	0.06	0.11	1.10	1.07	1.12
Guatemala	0.96	0.96	0.96	0.05	0.03	0.06	1.05	1.03	1.07
Guinea	0.86	0.85	0.86	0.35	0.31	0.38	1.55	1.46	1.64
Guinea Bissau	0.92	0.91	0.93	0.12	0.09	0.15	1.14	1.10	1.18
Guyana	0.92	0.91	0.94	0.30	0.23	0.37	1.43	1.28	1.58
Haiti	0.90	0.90	0.91	0.19	0.15	0.22	1.24	1.18	1.29
Honduras	0.97	0.96	0.97	0.06	0.05	0.08	1.07	1.05	1.09
India	0.79	0.79	0.80	0.47	0.46	0.48	1.95	1.92	1.98
Indonesia	0.96	0.96	0.96	0.19	0.17	0.22	1.24	1.20	1.28
Iraq	0.78	0.77	0.78	0.35	0.32	0.38	1.61	1.53	1.68
Jamaica	0.98	0.97	0.99	0.00	-0.05	0.06	1.00	0.95	1.06
Jordan	0.99	0.99	0.99	0.03	0.01	0.05	1.03	1.01	1.05
Kazakhstan	0.99	0.99	1.00	0.00	-0.01	0.02	1.00	0.99	1.02
Kenya	0.96	0.96	0.96	0.13	0.11	0.15	1.15	1.12	1.17
Kosovo	0.98	0.97	0.99	0.05	0.00	0.11	1.06	1.00	1.12
Kyrgyzstan	0.89	0.88	0.90	0.27	0.24	0.31	1.38	1.32	1.45
Laos	0.54	0.53	0.56	0.78	0.75	0.81	5.47	4.80	6.13
Lesotho	0.95	0.94	0.96	0.09	0.06	0.13	1.10	1.06	1.14
Liberia	0.96	0.95	0.97	0.10	0.08	0.13	1.11	1.08	1.14
Macedonia	0.99	0.98	1.00	0.03	-0.01	0.07	1.03	0.99	1.08
Madagascar	0.88	0.87	0.89	0.30	0.27	0.33	1.45	1.39	1.51
Malawi	0.95	0.94	0.95	0.04	0.03	0.06	1.05	1.03	1.06

Maldives	1.00	0.99	1.00	0.02	0.01	0.04	1.03	1.01	1.04
Mali	0.74	0.73	0.75	0.48	0.44	0.51	2.05	1.91	2.19
Mauritania	0.85	0.84	0.87	0.31	0.26	0.35	1.46	1.37	1.54
Mexico	0.98	0.98	0.99	0.05	0.02	0.07	1.05	1.02	1.08
Moldova	0.99	0.98	1.00	0.03	-0.02	0.08	1.03	0.98	1.08
Mongolia	0.99	0.98	0.99	0.00	-0.02	0.01	1.00	0.98	1.01
Montenegro	0.92	0.89	0.94	0.15	0.05	0.26	1.18	1.04	1.33
Mozambique	0.91	0.90	0.91	0.20	0.17	0.23	1.26	1.21	1.31
Namibia	0.97	0.96	0.97	0.03	0.00	0.05	1.03	1.00	1.05
Nepal	0.84	0.83	0.85	0.44	0.40	0.48	1.82	1.67	1.96
Niger	0.83	0.82	0.84	0.28	0.25	0.32	1.43	1.36	1.50
Nigeria	0.65	0.64	0.65	0.79	0.77	0.80	5.44	5.08	5.79
Pakistan	0.73	0.72	0.74	0.58	0.54	0.61	2.54	2.29	2.78
Palestine	0.99	0.99	1.00	0.00	-0.01	0.01	1.00	0.99	1.01
Panama	0.93	0.92	0.94	0.22	0.15	0.28	1.28	1.17	1.38
Peru	0.98	0.97	0.98	0.10	0.08	0.12	1.11	1.08	1.14
Philippines	0.96	0.95	0.96	0.15	0.12	0.18	1.18	1.14	1.22
Rwanda	0.99	0.99	0.99	0.01	0.00	0.02	1.01	1.00	1.02
Saint Lucia	0.97	0.93	1.00	0.10	-0.09	0.29	1.11	0.88	1.34
Sao Tome	0.97	0.96	0.99	0.06	0.02	0.11	1.07	1.02	1.12
Senegal	0.99	0.99	0.99	0.01	0.00	0.02	1.01	1.00	1.02
Serbia	0.98	0.98	0.99	-0.05	-0.19	0.09	0.95	0.81	1.09
Sierra Leone	0.98	0.97	0.98	0.03	0.02	0.04	1.03	1.02	1.05
South Sudan	0.41	0.39	0.42	0.55	0.51	0.59	4.53	3.81	5.25
Sudan	0.77	0.76	0.78	0.41	0.37	0.46	1.78	1.65	1.90
Suriname	0.91	0.89	0.92	0.17	0.11	0.23	1.21	1.12	1.29
Swaziland	0.97	0.97	0.98	0.06	0.03	0.09	1.07	1.03	1.10
Tajikistan	0.79	0.78	0.81	0.30	0.25	0.35	1.48	1.37	1.60
Tanzania	0.98	0.98	0.98	0.01	0.00	0.03	1.01	1.00	1.03
Thailand	0.82	0.80	0.83	0.34	0.25	0.42	1.55	1.35	1.75
Timor Leste	0.86	0.85	0.87	0.30	0.27	0.33	1.45	1.38	1.52
Togo	0.73	0.72	0.74	0.61	0.58	0.64	2.79	2.56	3.01
Tunisia	0.98	0.97	0.99	0.06	0.02	0.09	1.06	1.02	1.10
Turkmenistan	1.00	1.00	1.00	0.01	-0.01	0.02	1.01	0.99	1.02
Uganda	0.95	0.94	0.96	0.03	0.00	0.05	1.03	1.00	1.06
Ukraine	0.99	0.99	1.00	0.02	-0.01	0.04	1.02	0.99	1.04
Vietnam	0.96	0.95	0.97	0.39	0.27	0.51	1.64	1.33	1.96
Yemen	0.61	0.60	0.62	0.59	0.55	0.62	3.02	2.77	3.27
Zambia	0.96	0.96	0.96	0.10	0.08	0.12	1.11	1.09	1.13
Zimbabwe	0.93	0.93	0.94	0.10	0.07	0.13	1.11	1.08	1.15

Appendix 4. Antenatal care quality and wealth-related inequalities in 91 low and middle-income countries

Country	Antenatal care quality	95% CI		Slope index of inequality in antenatal care quality	95% CI		Relative index of inequality in antenatal care quality	95% CI	
Afghanistan	0.22	0.21	0.23	0.23	0.18	0.27	3.06	2.41	3.70
Albania	0.83	0.81	0.85	0.41	0.33	0.49	1.74	1.49	1.99
Algeria	0.73	0.72	0.74	0.20	0.14	0.25	1.31	1.21	1.41
Argentina	0.99	0.98	0.99	0.02	0.01	0.04	1.02	1.01	1.04
Armenia	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Bangladesh	0.55	0.53	0.57	0.59	0.53	0.65	3.87	3.08	4.66
Belarus	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00
Belize	0.99	0.98	0.99	0.03	-0.01	0.06	1.03	0.99	1.06
Benin	0.80	0.79	0.80	0.28	0.24	0.31	1.44	1.37	1.51
Bhutan	0.90	0.89	0.91	0.28	0.22	0.33	1.39	1.28	1.49
Bolivia	0.67	0.66	0.68	0.69	0.66	0.72	3.78	3.36	4.21
Bosnia Herzegovina	0.98	0.97	0.99	0.05	-0.05	0.14	1.05	0.94	1.16
Burkina Faso	0.60	0.59	0.61	0.35	0.32	0.39	1.86	1.74	1.98
Burundi	0.06	0.06	0.07	0.15	0.11	0.18	11.15	4.51	17.79
Cambodia	0.43	0.42	0.45	0.16	0.10	0.21	1.45	1.26	1.64
Cameroon	0.85	0.84	0.86	0.53	0.48	0.57	2.15	1.96	2.34
Central African Rep	0.71	0.69	0.73	0.22	0.15	0.29	1.37	1.22	1.52
Chad	0.37	0.36	0.38	0.37	0.33	0.42	3.01	2.57	3.45
Colombia	0.96	0.96	0.97	0.02	0.00	0.05	1.03	1.00	1.05
Comoros	0.80	0.78	0.82	0.36	0.28	0.44	1.62	1.41	1.82
Congo	0.92	0.92	0.93	0.33	0.29	0.37	1.50	1.41	1.58
Costa Rica	0.95	0.93	0.96	-0.15	-0.41	0.12	0.85	0.58	1.12
Cote d'Ivoire	0.67	0.66	0.68	0.41	0.36	0.46	1.95	1.75	2.14
Dem. Republic of the Congo	0.46	0.45	0.47	0.56	0.52	0.59	4.14	3.62	4.65
Dominican Republic	0.98	0.98	0.99	0.02	0.00	0.05	1.02	1.00	1.05
Egypt	0.74	0.73	0.75	0.30	0.26	0.33	1.52	1.44	1.59
El Salvador	0.97	0.96	0.97	0.03	0.00	0.07	1.03	1.00	1.07
Ethiopia	0.56	0.54	0.57	0.41	0.35	0.48	2.28	1.94	2.62
Gabon	0.95	0.94	0.95	0.07	0.04	0.11	1.08	1.04	1.12
Ghana	0.96	0.96	0.97	0.13	0.10	0.16	1.15	1.11	1.19
Guatemala	0.65	0.64	0.66	0.61	0.59	0.64	3.04	2.81	3.28
Guinea	0.52	0.50	0.53	0.70	0.66	0.74	5.80	4.81	6.78
Guinea Bissau	0.81	0.80	0.83	0.33	0.28	0.37	1.52	1.42	1.62
Guyana	0.93	0.92	0.95	0.23	0.13	0.33	1.30	1.13	1.48
Haiti	0.80	0.79	0.81	0.33	0.29	0.38	1.57	1.46	1.67
Honduras	0.89	0.88	0.90	0.28	0.25	0.31	1.40	1.34	1.45
India	0.84	0.83	0.84	0.41	0.40	0.42	1.74	1.71	1.77
Indonesia	0.27	0.26	0.28	0.16	0.12	0.19	1.81	1.57	2.06
Iraq	0.83	0.83	0.84	0.13	0.09	0.16	1.17	1.12	1.22
Jamaica	0.99	0.98	1.00	-0.02	-0.06	0.02	0.98	0.94	1.02
Jordan	0.94	0.93	0.94	0.05	0.01	0.08	1.05	1.01	1.09
Kazakhstan	1.00	1.00	1.00	0.00	0.00	0.01	1.00	1.00	1.01
Kenya	0.85	0.84	0.86	0.32	0.28	0.35	1.49	1.41	1.56
Kosovo	0.83	0.80	0.86	0.24	0.14	0.34	1.35	1.17	1.52
Kyrgyzstan	0.25	0.24	0.26	0.34	0.30	0.39	4.55	3.46	5.65
Laos	0.33	0.31	0.35	0.52	0.45	0.59	6.59	4.47	8.71
Lesotho	0.80	0.78	0.82	0.22	0.15	0.28	1.32	1.21	1.43
Liberia	0.84	0.83	0.85	0.34	0.30	0.38	1.54	1.45	1.63
Macedonia	0.95	0.94	0.97	0.07	0.00	0.15	1.08	0.99	1.16
Madagascar	0.22	0.21	0.23	0.54	0.50	0.57	20.80	14.90	26.70
Malawi	0.30	0.29	0.30	0.14	0.10	0.18	1.61	1.41	1.81

Maldives	0.96	0.95	0.97	0.01	-0.02	0.04	1.01	0.98	1.04
Mali	0.43	0.42	0.45	0.58	0.54	0.62	5.29	4.36	6.22
Mauritania	0.68	0.66	0.69	0.68	0.63	0.72	3.45	3.00	3.89
Mexico	0.92	0.91	0.93	0.13	0.09	0.18	1.16	1.09	1.22
Moldova	0.99	0.98	1.00	-0.01	-0.03	0.02	0.99	0.97	1.02
Mongolia	0.95	0.94	0.96	0.10	0.06	0.13	1.11	1.07	1.15
Montenegro	0.97	0.96	0.99	0.05	-0.02	0.12	1.06	0.98	1.14
Mozambique	0.39	0.37	0.40	0.26	0.22	0.31	2.03	1.75	2.30
Namibia	0.94	0.93	0.94	0.09	0.06	0.13	1.10	1.06	1.15
Nepal	0.43	0.41	0.44	0.71	0.67	0.75	9.57	7.32	11.83
Niger	0.29	0.28	0.30	0.58	0.55	0.61	12.86	9.88	15.85
Nigeria	0.78	0.77	0.79	0.60	0.57	0.63	2.75	2.54	2.96
Pakistan	0.52	0.50	0.53	0.74	0.70	0.77	7.75	6.09	9.41
Palestine	0.96	0.96	0.97	-0.08	-0.11	-0.04	0.92	0.89	0.95
Panama	0.93	0.91	0.94	0.15	0.08	0.22	1.18	1.09	1.28
Peru	0.85	0.84	0.86	0.43	0.39	0.46	1.77	1.66	1.87
Philippines	0.57	0.55	0.58	0.61	0.58	0.65	3.59	3.20	3.97
Rwanda	0.53	0.52	0.55	0.22	0.17	0.26	1.51	1.38	1.65
Saint Lucia	0.97	0.94	1.01	0.07	-0.10	0.24	1.08	0.88	1.28
Sao Tome	0.96	0.95	0.98	0.12	0.06	0.18	1.13	1.05	1.21
Senegal	0.79	0.78	0.81	0.29	0.24	0.34	1.46	1.35	1.57
Serbia	0.95	0.94	0.97	0.04	-0.07	0.14	1.04	0.92	1.16
Sierra Leone	0.72	0.71	0.73	0.31	0.27	0.34	1.56	1.47	1.65
South Sudan	0.29	0.27	0.31	0.29	0.22	0.36	3.24	2.07	4.41
Sudan	0.79	0.78	0.80	0.44	0.39	0.49	1.86	1.70	2.02
Suriname	0.95	0.94	0.97	-0.04	-0.09	0.01	0.96	0.91	1.01
Swaziland	0.86	0.84	0.87	0.24	0.18	0.30	1.34	1.24	1.44
Tajikistan	0.91	0.90	0.92	0.27	0.21	0.33	1.38	1.27	1.49
Tanzania	0.52	0.51	0.54	0.63	0.60	0.67	4.18	3.69	4.68
Thailand	0.99	0.99	1.00	0.00	-0.02	0.01	1.00	0.98	1.01
Timor Leste	0.09	0.08	0.10	0.06	0.02	0.09	1.89	1.18	2.60
Togo	0.87	0.86	0.88	0.23	0.19	0.28	1.33	1.26	1.41
Tunisia	0.91	0.90	0.93	0.02	-0.04	0.09	1.03	0.95	1.10
Turkmenistan	0.99	0.99	1.00	0.01	-0.01	0.02	1.01	0.99	1.02
Uganda	0.18	0.17	0.19	0.27	0.22	0.32	4.87	3.39	6.36
Ukraine	1.00	0.99	1.00	-0.01	-0.03	0.01	0.99	0.97	1.01
Vietnam	0.59	0.56	0.61	0.56	0.48	0.64	2.95	2.35	3.55
Yemen	0.70	0.69	0.71	0.13	0.08	0.18	1.20	1.11	1.30
Zambia	0.42	0.41	0.43	0.53	0.50	0.57	4.28	3.78	4.77
Zimbabwe	0.67	0.66	0.69	0.40	0.35	0.45	1.89	1.71	2.06

Antenatal care quality defined as the proportion of women who report blood pressure monitoring and urine and blood testing at any point during the pregnancy among those who had at least one visit with a skilled provider.

Appendix 5. Educational-related inequalities in antenatal care quality in 91 low and middle-income countries

Country	Slope index of inequality in antenatal care quality	95% CI		Relative index of inequality in antenatal care quality	95% CI	
Afghanistan	0.14	0.07	0.20	1.87	1.31	2.43
Albania	0.34	0.24	0.45	1.57	1.32	1.82
Algeria	0.14	0.09	0.20	1.22	1.12	1.31
Argentina	0.03	0.00	0.05	1.03	1.00	1.06
Armenia	0.00	0.00	0.00	1.00	1.00	1.00
Bangladesh	0.39	0.31	0.47	2.19	1.75	2.63
Belarus	0.00	0.00	0.00	1.00	1.00	1.00
Belize	0.00	-0.04	0.04	1.00	0.96	1.04
Benin	0.26	0.22	0.31	1.41	1.32	1.50
Bhutan	0.20	0.13	0.27	1.26	1.15	1.37
Bolivia	0.56	0.51	0.60	2.64	2.36	2.92
Bosnia Herzegovina	0.05	-0.06	0.17	1.06	0.93	1.18
Burkina Faso	0.42	0.37	0.47	2.12	1.90	2.34
Burundi	0.15	0.12	0.18	11.41	5.54	17.29
Cambodia	0.18	0.12	0.24	1.51	1.30	1.72
Cameroon	0.51	0.46	0.55	2.07	1.88	2.25
Central African Rep	0.11	0.03	0.19	1.17	1.03	1.30
Chad	0.14	0.09	0.20	1.49	1.26	1.72
Colombia	0.02	0.00	0.04	1.02	1.00	1.04
Comoros	0.27	0.18	0.36	1.42	1.24	1.61
Congo	0.16	0.13	0.19	1.20	1.15	1.24
Costa Rica	-0.01	-0.14	0.12	0.99	0.85	1.12
Cote d'Ivoire	0.22	0.16	0.29	1.40	1.25	1.55
Dem. Republic of the Congo	0.42	0.38	0.46	2.71	2.39	3.04
Dominican Republic	0.04	0.01	0.06	1.04	1.01	1.07
Egypt	0.22	0.19	0.26	1.36	1.29	1.43
El Salvador	0.03	-0.01	0.07	1.03	0.99	1.07
Ethiopia	0.44	0.37	0.50	2.39	1.99	2.79
Gabon	0.05	0.01	0.09	1.06	1.01	1.10
Ghana	0.09	0.06	0.12	1.10	1.07	1.14
Guatemala	0.53	0.50	0.56	2.51	2.32	2.70
Guinea	0.48	0.42	0.54	2.78	2.32	3.24
Guinea Bissau	0.24	0.19	0.29	1.35	1.25	1.45
Guyana	0.12	0.05	0.20	1.15	1.04	1.25
Haiti	0.30	0.25	0.35	1.48	1.38	1.59
Honduras	0.27	0.24	0.30	1.38	1.32	1.44
India	0.36	0.35	0.37	1.62	1.59	1.64
Indonesia	0.11	0.07	0.15	1.51	1.29	1.73
Iraq	0.09	0.05	0.14	1.12	1.07	1.18
Jamaica	0.04	0.00	0.09	1.05	1.00	1.09
Jordan	0.09	0.05	0.12	1.10	1.05	1.14
Kazakhstan	0.00	0.00	0.01	1.00	1.00	1.01
Kenya	0.28	0.25	0.32	1.42	1.35	1.49
Kosovo	0.27	0.16	0.37	1.40	1.19	1.60
Kyrgyzstan	0.28	0.23	0.32	3.23	2.52	3.95
Laos	0.42	0.35	0.49	4.29	2.99	5.58
Lesotho	0.20	0.14	0.26	1.29	1.18	1.39

Liberia	0.24	0.20	0.29	1.35	1.27	1.44
Macedonia	0.10	0.01	0.18	1.11	1.01	1.22
Madagascar	0.44	0.40	0.48	9.31	7.20	11.42
Malawi	0.11	0.07	0.15	1.44	1.25	1.63
Maldives	0.03	0.00	0.07	1.04	1.00	1.08
Mali	0.44	0.38	0.50	3.03	2.49	3.57
Mauritania	0.39	0.33	0.44	1.82	1.64	2.00
Mexico	0.13	0.07	0.19	1.15	1.07	1.24
Moldova	0.01	-0.02	0.04	1.01	0.98	1.04
Mongolia	0.09	0.05	0.12	1.09	1.05	1.14
Montenegro	0.01	-0.05	0.08	1.02	0.94	1.09
Mozambique	0.26	0.22	0.31	2.02	1.75	2.30
Namibia	0.06	0.03	0.10	1.07	1.03	1.11
Nepal	0.50	0.44	0.56	3.79	3.01	4.57
Niger	0.43	0.38	0.47	4.85	3.89	5.81
Nigeria	0.41	0.38	0.44	1.83	1.72	1.93
Pakistan	0.66	0.62	0.70	5.20	4.34	6.07
Palestine	0.02	-0.01	0.04	1.02	0.99	1.05
Panama	0.18	0.10	0.27	1.23	1.10	1.35
Peru	0.32	0.29	0.36	1.50	1.43	1.58
Philippines	0.48	0.43	0.52	2.52	2.26	2.78
Rwanda	0.21	0.16	0.25	1.48	1.34	1.62
Saint Lucia	0.00	0.00	0.00	1.00	1.00	1.00
Sao Tome	0.06	0.00	0.12	1.07	1.00	1.14
Senegal	0.27	0.20	0.35	1.43	1.29	1.58
Serbia	-0.02	-0.15	0.10	0.98	0.84	1.11
Sierra Leone	0.24	0.19	0.28	1.40	1.30	1.50
South Sudan	0.18	0.09	0.27	1.94	1.26	2.61
Sudan	0.40	0.35	0.45	1.74	1.59	1.88
Suriname	-0.05	-0.12	0.02	0.95	0.88	1.02
Swaziland	0.20	0.15	0.26	1.28	1.18	1.37
Tajikistan	0.09	0.04	0.14	1.11	1.04	1.17
Tanzania	0.47	0.43	0.51	2.65	2.36	2.94
Thailand	0.01	-0.02	0.03	1.01	0.98	1.03
Timor Leste	0.06	0.03	0.09	1.98	1.22	2.73
Togo	0.14	0.09	0.19	1.18	1.11	1.25
Tunisia	0.01	-0.06	0.08	1.01	0.93	1.09
Turkmenistan	0.50	-0.19	1.20	2.01	-0.81	4.83
Uganda	0.28	0.23	0.33	5.04	3.59	6.49
Ukraine	0.01	0.00	0.03	1.01	1.00	1.03
Vietnam	0.42	0.33	0.51	2.20	1.74	2.66
Yemen	0.09	0.04	0.14	2.20	1.74	2.66
Zambia	0.38	0.34	0.42	2.66	2.36	2.96
Zimbabwe	0.35	0.29	0.40	1.73	1.56	1.90

Antenatal care quality defined as the proportion of women who report blood pressure monitoring and urine and blood testing at any point during the pregnancy among those who had at least one visit with a skilled provider.

Appendix 6. Antenatal care quality in the richest wealth quintile of 91 low and middle-income countries

Country	Antenatal care quality
Afghanistan	29.5
Albania	97.6
Algeria	78.1
Argentina	99.7
Armenia	100.0
Bangladesh	77.1
Belarus	100.0
Belize	100.0
Benin	92.9
Bhutan	98.7
Bolivia	90.5
Bosnia Herzegovina	98.1
Burkina Faso	82.6
Burundi	17.6
Cambodia	52.9
Cameroon	96.2
Central African Rep	79.6
Chad	59.5
Colombia	97.1
Comoros	90.9
Congo	98.7
Costa Rica	82.4
Cote d'Ivoire	84.4
Dem. Republic of the Congo	81.8
Dominican Republic	98.5
Egypt	88.2
El Salvador	97.9
Ethiopia	80.0
Gabon	96.7
Ghana	99.4
Guatemala	92.0
Guinea	87.7
Guinea Bissau	96.5
Guyana	100.0
Haiti	94.2
Honduras	97.1
India	95.1
Indonesia	33.2
Iraq	87.4
Jamaica	100.0
Jordan	96.6
Kazakhstan	100.0
Kenya	96.9
Kosovo	92.7
Kyrgyzstan	49.1
Laos	55.6
Lesotho	88.5
Liberia	96.0
Macedonia	95.6
Madagascar	61.7
Malawi	39.4
Maldives	95.8
Mali	73.5

Mauritania	90.0
Mexico	95.8
Moldova	98.5
Mongolia	97.7
Montenegro	99.1
Mozambique	58.5
Namibia	96.0
Nepal	77.1
Niger	65.3
Nigeria	92.9
Pakistan	83.4
Palestine	93.5
Panama	97.2
Peru	96.6
Philippines	82.7
Rwanda	71.7
Saint Lucia	100.0
Sao Tome	100.0
Senegal	92.1
Serbia	93.7
Sierra Leone	88.2
South Sudan	40.3
Sudan	95.5
Suriname	96.3
Swaziland	93.1
Tajikistan	97.9
Tanzania	85.9
Thailand	98.8
Timor Leste	11.7
Togo	96.0
Tunisia	94.1
Turkmenistan	99.6
Uganda	35.6
Ukraine	99.1
Vietnam	82.5
Yemen	76.9
Zambia	68.9
Zimbabwe	82.7

Antenatal care quality defined as the proportion of women who report blood pressure monitoring and urine and blood testing at any point during the pregnancy among those who had at least one visit with a skilled provider.

Appendix 7. Antenatal care coverage and quality (measured by three and four items) by GDP per capita in 55 low and middle-income countries

