

Appendix 1. Negative Binomial Regression model examining the association between women's empowerment and the ideal number of children for LMRCs (By Region)¹

Dependent Variable: Women Ideal Number of Children	African Region	Eastern Mediterranean Region	European Region	Americans Region	South East Asia	Western Pacific
	Adjusted IRR (95% CI)	Adjusted IRR (95% CI)	Adjusted IRR (95% CI)	Adjusted IRR (95% CI)	Adjusted IRR (95% CI)	Adjusted IRR (95% CI)
Women's Empowerment						
<i>No voice of women in all three decisions (ref)</i>						
<i>Has any voice in three household decision</i>	0.94*** (0.93-0.95)	0.95***(0.92-0.97)	1.06*(1.01-1.11)	0.94***(0.90-0.98)	1.02* (1.01-1.03)	1.04 (0.94-1.14)
<i>At least one reason is rationalized for wife beating (ref)</i>						
<i>No reason is rationalized for wife beating</i>	0.96*** (0.95-0.97)	0.89*** (0.86-0.93)	0.93*** (0.89-0.98)	1.01 (0.96-1.06)	0.97*** (0.95-0.98)	1.03 (0.97-1.10)
Husband Influence						
<i>Husband's preferred number of offspring</i>	1.02*** (1.01-1.03)	1.02*** (1.01-1.03)	1.04*** (1.03-1.06)	1.04*** (1.03-1.05)	1.07*** (1.06-1.08)	1.03*** (1.01-1.06)

***p < 0.001, **p < 0.01. *p < 0.05.

Abbreviations: ref Reference; IRR Incidence Rate Ratio; CI Confidence Interval

¹Only exposure variables are reported in this analysis. The model is adjusted with age difference, education difference, age at first marriage, getting permission to health care is a problem, women's education, residence type, wealth index, polygamous Union any media exposure to family planning, women working status, women living children and women's decision in contraceptive use

Appendix 2. Multivariable logistic regression analysis examining the association between women's empowerment and ability to achieve fertility preference for LMRCs (By Region)²

	African Region	Eastern Mediterranean Region	European Region	Americans Region	South East Asia	Western Pacific
Dependent Variable: Women's ability to achieve fertility desire	Adjusted OR (95% CI)	Adjusted OR (95% CI)	Adjusted OR (95% CI)	Adjusted OR (95% CI)	Adjusted OR (95% CI)	Adjusted OR (95% CI)
Women's Empowerment						
<i>No voice of women in all three decisions (ref)</i>						
<i>Has any voice in three household decision</i>	1.21*** (1.15-1.28)	1.16* (1.02-1.33)	0.95 (0.72-1.26)	1.11 (0.95-1.30)	0.94* (0.89-0.99)	0.91 (0.57-1.45)
<i>At least one reason is rationalized for wife beating (ref)</i>						
<i>No reason is rationalized for wife beating</i>	1.01 (0.95-1.05)	1.27*** (1.08-1.50)	0.64*** (0.50-0.83)	1.12 (0.92-1.36)	1.14*** (1.08-1.19)	0.56*** (0.40-0.77)
Husband's Influence						
<i>Husband-wife match with preferred offspring (ref)</i>						
<i>Husband desire higher preferred offspring than wife</i>	2.4*** (2.24-2.57)	5.11*** (4.29-6.09)	9.85*** (7.33-13.23)	1.90*** (1.57-2.30)	5.12*** (4.84-5.42)	4.88*** (3.45-6.91)
<i>Husband desire lower preferred offspring than wife</i>	0.59*** (0.55-0.64)	0.76** (0.63-0.92)	0.66 (0.42-1.04)	0.28*** (0.23-0.34)	0.65*** (0.61-0.70)	0.50*** (0.32-0.81)

***p < 0.001, **p < 0.01. *p < 0.05.

Abbreviations: ref Reference; OR: Odd Ratio; CI Confidence Interval

²Only exposure variables are reported in this analysis. The model is adjusted with age difference, education difference, age at first marriage, getting permission to health care is a problem, women's education, residence type, wealth index, polygamous Union any media exposure to family planning, women working status, and women's decision in contraceptive use