**Table 1: Sensitivity analysis for number of antenatal care contacts**

|  |
| --- |
| **Number of antennal care contacts** |
|  | **Adjusted Odds Ratios (95% CI)**  |
| **Predictor of interest**  |  |
| Marriage type |  |
| One wife marriage | Ref.  |
| Two wives marriage | 0.82 (0.69, 0.98)\* |
| Three or more wives marriage  | 0.75 (0.50, 1.14) |

CI = confidence interval; Ref. = reference category; \* = p value < 0.05. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, and access to media.

**Table 2: Sensitivity analysis for assisted skilled birth**

|  |
| --- |
| **Assisted skilled birth** |
|  | **Adjusted Odds Ratios (95% CI)**  |
| **Predictor of interest**  |  |
| Marriage type |  |
| One wife marriage | Ref.  |
| Two wives marriage | 0.77 (0.64, 0.91)\* |
| Three or more wives marriage  | 0.65 (0.44, 0.96)\* |

CI = confidence interval; Ref. = reference category; \* = p value < 0.05. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, and access to media.

**Table 3: Sensitivity analysis for modern contraceptive use**

|  |
| --- |
| **Modern Contraceptive use** |
|  | **Adjusted Odds Ratios (95% CI)**  |
| **Predictor of interest**  |  |
| Marriage type |  |
| One wife marriage | Ref.  |
| Two wives marriage | 0.82 (0.67, 1.01) |
| Three or more wives marriage  | 0.71 (0.42, 1.20) |

CI = confidence interval; Ref. = reference category; \* = p value < 0.05. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, access to media, number of antenatal care visits and assisted skilled birth provider.

**Table 4: Average marginal effect of polygynous marriage on attaining eight plus ANC contacts**

|  |  |
| --- | --- |
|  | **Number of ANC contacts** |
|  | **aME (95% CI)** | **P value**  |
| **Marriage type** |  |   |
|  Monogamous  | Ref.  |  |
| Polygynous  | -4.36 (-8.02, -0.70) | 0.020  |

ANC = antenatal care; aME = adjusted marginal effects; CI = confidence interval; Ref. = reference category. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, and access to media.

**Table 5: Average marginal effect of polygynous marriage of use of assisted skilled birth**

|  |  |
| --- | --- |
|  | **Assisted skilled birth** |
|  | **aME (95% CI)** | **P-value**  |
| **Marriage type** |  |   |
|  Monogamous  | Ref.  |  |
| Polygynous  | -3.60 (-5.82, -1.37)  | 0.002  |

aME = adjusted marginal effects; CI = confidence interval; Ref. = reference category. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, and access to media.

**Table 6: Average marginal effect of polygynous marriage of use of modern contraception**

|  |  |
| --- | --- |
|  | **Modern contraceptive Use** |
|  | **aME (95% CI)** | **P-value**  |
| **Marriage type** |  |   |
|  Monogamous  | Ref.  |  |
| Polygynous  | -4.20 (-8.10, -0.31)  | 0.034 |

AME = adjusted marginal effects; CI = confidence interval; Ref. = reference category. Covariates controlled included age, parity, place of residence, education, wealth index, health insurance coverage, access to media, number of antenatal care visits and assisted skilled birth provider.

**Table 7: Univariate association between polygynous marriage and ANC contacts, assisted skilled birth, and modern contraceptive use**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Number of ANC contacts (model I)** | **Assisted skilled birth (model II)** | **Modern contraceptive Use (model III)** |
|  | **Unadjusted OR (95% CI)** | **Unadjusted OR (95% CI)** | **Unadjusted OR (95% CI)** |
| **Predictor of interest**  |  |  |  |
| Marriage type |  |   |  |
| Monogamous  | Ref.  | Ref. | Ref. |
| Polygynous  | 0.46 (0.38, 0.55)\* | 0.33 (0.28, 0.40)\* | 0.76 (0.64, 0.91)\* |
| **Potential confounders**  |  |  |  |
| Age (years) |  |  |  |
| 15-19 | Ref.  | Ref. | Ref. |
| 20-34 | 3.61 (1.93, 6.72)\* | 1.54 (0.86, 2.74) | 1.44 (0.78, 2.68) |
| 35-49 | 3.60 (1.93, 6.68)\* | 1.41 (0.78, 2.55) | 1.03 (0.55, 1.93) |
| Parity  |  |  |  |
| Nulliparous  | Ref.  | Ref. | Ref.  |
| Primiparous  | 1.74 (0.54, 5.61) | 0.36 (0.07, 1.76) | 4.51 (2.29, 8.89)\* |
| Multiparous  | 1.21 (0.38, 3.85) | 0.15 (0.3, 0.74)\* | 9.18 (4.76, 17.68)\* |
| Place of residence  |  |  |  |
| Urban  | Ref.  | Ref. | Ref.  |
| Rural  | 0.42 (0.35, 0.50)\* | 0.16 (0.12, 0.22)\* | 1.34 (1.17, 1.53)\* |
| Education  |  |  |  |
| No formal  | Ref.  | Ref. | Ref.  |
| Primary | 1.53 (1.26, 1.86)\* | 2.15 (1.72, 2.70)\* | 1.18 (098, 1.41) |
| Secondary  | 2.74 (2.32, 3.24)\* | 6.24 (4.86, 8.00)\* | 1.24 (1.07, 1.44)\* |
| Tertiary  | 6.94 (5.31, 9.08)\* | 70.24 (24.27, 203.32)\* | 1.06 (0.82, 1.37) |
| Wealth index  |  |  |  |
| Poor  | Ref.  | Ref. | Ref.  |
| Middle  | 1.93 (1.56, 2.39)\* | 2.85 (2.18, 3.72)\* | 1.20 (1.01, 1.42)\* |
| Rich  | 4.75 (4.01, 5.64)\* | 14.94 (10.83, 20.61)\* | 0.79 (0.69, 0.91)\* |
| Valid health insured  |  |  |  |
| Yes  | Ref.  | Ref. | Ref. |
| No  | 1.27 (1.10, 1.46)\* | 1.71 (1.44, 2.03)\* | 0.88 (0.77, 1.00)\* |
| Access to media  |  |  |  |
| Yes  | Ref.  | Ref. | Ref.  |
| No  | 1.37 (1.17, 1.61)\* | 1.80 (1.36, 2.39)\* | 1.02 (0.87, 1.19) |
| Number of ANC visits |  |  |  |
| 0-7  |  |  | Ref.  |
| ≥ 8 |  |  | 1.03 (0.88, 1.22) |
| Assisted Birth Provider |  |  |  |
| Unskilled  |  |  | Ref.  |
|  Skilled  |  |  | 1.32 (1.09, 1.60)\* |

ANC = antenatal care; OR = odds ratio; CI = confidence interval; Ref. = reference category; \* = p value < 0.05.