**Table S1: Distribution of out-of-pocket costs for various types of child delivery in Bangladesh (US$) based on the 2014 BDHS Survey**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Delivery** | | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | | **P-value** |
|  | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** |  |
| **Age** | 24.62 (5.87) | 24.00 (20.00) | 24.05 (5.63) | 23.00 (20.00) | 24.87 (5.52) | 24.00 (21.00) | 24.59 (5.75) | 24.00 (20.00) | <0.001 |
| **Women’s age group** |  |  |  |  |  |  |  |  |  |
| 15‐19 | 17.34 (27.44) | 8.76 (23.77) | 55.07 (56.27) | 37.53 (50.04) | 220.49 (129.62) | 187.66 (125.11) | 66.64 (105.10) | 20.02 (68.81) | <0.001 |
| 20‐24 | 14.97 (22.07) | 6.26 (17.52) | 63.85 (78.85) | 37.53 (50.04) | 236.99 (180.56) | 212.69 (187.66) | 75.41 (131.49) | 25.02 (81.32) |  |
| 25‐34 | 15.18 (25.87) | 6.26 (17.52) | 37.53 (43.79) | 289.16 (400.00) | 225.20 (186.41) | 95.61 (241.65) | 95.61 (241.65) | 25.02 (118.85) |  |
| 35‐49 | 14.52 (26.23) | 6.26 (18.77) | 56.04 (65.93) | 37.53 (62.55) | 284.53 (197.43) | 250.22 (225.20) | 86.63 (153.69) | 15.01 (108.85) |  |
| P-value | 0.223 |  | 0.613 |  | <0.001 |  | <0.001 |  |  |
| **Women's education** |  |  |  |  |  |  |  |  |  |
| No education | 11.78 (21.12) | 6.26 (12.51) | 45.40 (43.79) | 25.02 (48.79) | 194.35 (116.86) | 181.41 (125.11) | 28.73 (61.89) | 6.26 (24.40) | 0.034 |
| Primary | 13.23 (23.58) | 6.26 (14.39) | 51.79 (60.27) | 37.53 (49.42) | 232.12 (136.56) | 212.69 (187.66) | 45.76 (91.12) | 12.51 (35.03) |  |
| Secondary | 17.91 (27.15) | 10.01 (22.52) | 59.27 (72.91) | 37.53 (50.04) | 252.98 (242.63) | 225.20 (175.15) | 89.32 (166.34) | 25.02 (118.85) |  |
| Higher | 23.12 (26.73) | 12.51 (31.28) | 62.55 (59.43) | 62.55 (59.43) | 291.82 (342.82) | 250.22 (162.64) | 191.37 (291.26) | 125.11 (218.32) |  |
| P-value | <0.001 |  | <0.001 |  | 0.025 |  | <0.001 |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |  |  |
| Not working | 16.04 (26.12) | 6.26 (18.77) | 64.04 (77.47) | 37.53 (50.04) | 264.15 (279.59) | 231.45 (181.41) | 87.12 (179.75) | 25.02 (106.34) | 0.034 |
| Working | 13.61 (21.61) | 6.26 (13.76) | 43.07 (48.88) | 25.02 (50.04) | 231.45 (141.09) | 200.18 (162.64) | 59.23 (107.29) | 12.51 (58.80) |  |
| P-value | 0.031 |  | <0.001 |  | 0.121 |  | <0.001 |  |  |
| **Women’s BMI** |  |  |  |  |  |  |  |  |  |
| Underweight | 13.81 (22.17) | 6.26 (14.39) | 50.90 (62.50) | 37.53 (47.54) | 205.04 (121.15) | 187.66 (125.11) | 43.95 (83.17) | 12.51 (35.03) | <0.001 |
| Normal weight | 15.85 (27.57) | 6.26 (17.52) | 59.88 (70.25) | 37.53 (56.30) | 241.09 (269.56) | 187.66 (150.13) | 67.42 (152.73) | 15.01 (70.06) |  |
| Overweight | 17.08 (23.97) | 10.01 (22.52) | 61.67 (68.05) | 37.53 (50.04) | 277.88 (219.31) | 250.22 (162.64) | 119.75 (181.62) | 37.53 (177.66) |  |
| Obese | 15.79 (17.52) | 12.51 (23.77) | 76.49 (115.60) | 37.53 (43.79) | 305.23 (375.42) | 250.22 (225.20) | 169.21 (300.54) | 75.07 (237.71) |  |
| P-value | 0.129 |  | 0.157 |  | <0.001 |  | <0.001 |  |  |
| **ANC visit** |  |  |  |  |  |  |  |  |  |
| No ANC | 11.59 (24.30) | 6.26 (12.35) | 55.40 (59.17) | 25.02 (75.07) | 239.67 (133.07) | 237.71 (187.66) | 22.83 (57.51) | 6.26 (15.01) | <0.001 |
| 1‐3 | 16.72 (25.48) | 8.76 (22.52) | 37.53 (43.79) | 37.53 (43.79) | 228.19 (128.34) | 187.66 (187.66) | 69.16 (108.49) | 25.02 (68.81) |  |
| ≥4 | 18.52 (24.85) | 10.13 (23.15) | 71.13 (94.29) | 37.53 (50.04) | 282.66 (332.98) | 250.22 (165.77) | 136.39 (248.77) | 62.55 (175.15) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband age** |  |  |  |  |  |  |  |  |  |
| 15-29 | 16.86 (28.05) | 8.76 (22.52) | 56.42 (71.12) | 37.53 (43.79) | 230.38 (186.78) | 190.79 (162.64) | 68.10 (125.66) | 18.77 (68.81) | <0.001 |
| 30-44 | 15.21 (24.35) | 6.26 (17.52) | 63.72 (76.83) | 37.53 (56.30) | 268.88 (296.70) | 225.20 (162.64) | 90.25 (191.02) | 25.02 (118.85) |  |
| 45 or above | 12.67 (18.13) | 6.26 (14.51) | 51.14 (53.89) | 37.53 (50.04) | 282.04 (158.28) | 250.22 (206.43) | 72.56 (130.76) | 12.51 (60.05) |  |
| P-value | 0.051 |  | 0.322 |  | 0.0735 |  | <0.001 |  |  |
| **Husband education** |  |  |  |  |  |  |  |  |  |
| No education | 12.58 (25.43) | 6.26 (12.51) | 44.33 (57.91) | 25.02 (37.53) | 212.03 (135.97) | 187.66 (125.11) | 34.36 (76.39) | 6.26 (23.77) | <0.001 |
| Primary | 15.19 (25.10) | 6.26 (17.52) | 50.70 (47.69) | 37.53 (43.79) | 242.74 (207.46) | 187.66 (187.66) | 55.06 (116.99) | 12.51 (45.04) |  |
| Secondary | 17.34 (23.79) | 10.01 (22.52) | 64.57 (85.75) | 37.53 (56.30) | 239.14 (178.28) | 200.18 (187.66) | 90.36 (142.08) | 25.02 (118.85) |  |
| Higher | 21.41 (27.17) | 12.51 (21.27) | 81.05 (87.09) | 62.55 (55.05) | 301.22 (364.36) | 250.22 (162.64) | 183.29 (300.26) | 125.11 (225.20) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband occupation** |  |  |  |  |  |  |  |  |  |
| Farmer | 11.67 (20.30) | 6.26 (12.51) | 48.48 (43.82) | 37.53 (46.29) | 199.32 (119.66) | 187.66 (143.88) | 47.23 (86.61) | 12.51 (47.54) | <0.001 |
| Agriculture | 13.65 (23.67) | 6.26 (14.64) | 50.46 (61.54) | 25.02 (43.79) | 224.10 (139.19) | 187.66 (156.39) | 34.46 (75.06) | 7.51 (23.77) |  |
| Day labor | 12.60 (22.35) | 6.26 (12.45) | 48.0 (264.37) | 25.02 (50.04) | 204.42 (118.97) | 200.18 (125.11) | 37.40 (76.31) | 7.51 (23.77) |  |
| Factory worker | 15.34 (24.53) | 6.26 (16.26) | 58.23 (89.78) | 37.53 (50.04) | 260.92 (147.02) | 250.22 (150.13) | 69.11 (120.57) | 14.39 (56.30) |  |
| Service holder | 25.25 (26.89) | 18.77 (31.28) | 90.31 (110.22) | 62.55 (53.80) | 292.99 (216.45) | 250.22 (225.20) | 189.43 (209.36) | 125.11 (212.69) |  |
| Business | 17.15 (30.30) | 7.51 (17.27) | 54.73 (54.98) | 37.53 (52.55) | 278.77 (333.87) | 250.22 (175.15) | 109.41 (226.75) | 25.02 (143.50) |  |
| Skilled worker | 17.79 (22.87) | 12.51 (22.52) | 66.58 (81.85) | 37.53 (50.04) | 246.33 (284.40) | 193.92 (187.66) | 85.66 (178.74) | 25.02 (106.34) |  |
| Other | 18.55 (38.60) | 6.26 (24.27) | 85.07 (88.00) | 53.17 (75.07) | 269.19 (101.01) | 253.35 (137.62) | 87.09 (121.74) | 25.02 (118.85) |  |
| P-value | <0.001 |  | <0.001 |  | 0.072 |  | <0.001 |  |  |
| **Household size** |  |  |  |  |  |  |  |  |  |
| ≤4 | 14.87 (24.85) | 6.26 (17.77) | 55.40 (74.45) | 37.53 (46.92) | 245.16 (196.23) | 225.20 (187.66) | 82.45 (145.46) | 21.27 (93.83) | 0.166 |
| >4 | 15.68 (25.21) | 7.51 (17.52) | 62.08 (72.56) | 37.53 (55.05) | 265.38 (289.03) | 225.20 (175.15) | 80.27 (175.77) | 18.77 (81.32) |  |
| P-value | 0.450 |  | 0.2583 |  | 0.230 |  | 0.687 |  |  |
| **Wealth index** |  |  |  |  |  |  |  |  |  |
| Poor | 13.07 (23.98) | 6.26 (11.89) | 51.99 (54.81) | 37.53 (43.79) | 212.56 (138.32) | 187.66 (125.11) | 34.63 (74.70) | 7.51 (23.77) | <0.001 |
| Middle | 16.52 (25.89) | 8.13 (17.52) | 52.60 (68.70) | 37.53 (43.79) | 217.03 (136.05) | 187.66 (137.62) | 61.95 (104.26) | 18.77 (56.30) |  |
| Rich | 19.37 (26.18) | 12.51 (21.27) | 67.27 (82.66) | 37.53 (55.05) | 277.09 (296.94) | 250.22 (162.64) | 135.13 (228.96) | 62.55 (187.66) |  |
| P-value | <0.001 |  | 0.025 |  | <0.001 |  | <0.001 |  |  |
| **Birth order** |  |  |  |  |  |  |  |  |  |
| 1 | 18.23 (27.06) | 11.26 (21.27) | 68.73 (80.68) | 50.04 (50.04) | 251.52 (283.74) | 212.69 (187.66) | 100.03 (193.07) | 31.28 (141.37) | 0.1697 |
| 2‐3 | 14.63 (25.26) | 6.26 (18.02) | 51.32 (63.41) | 37.53 (46.92) | 266.70 (240.95) | 225.20 (186.41) | 77.28 (157.55) | 18.77 (83.82) |  |
| ≥4 | 12.42 (20.10) | 6.26 (12.14) | 55.74 (72.16) | 37.53 (49.11) | 259.84 (159.85) | 250.22 (231.45) | 37.88 (87.64) | 7.51 (23.77) |  |
| P-value | <0.001 |  | 0.010 |  | 0.653 |  | <0.001 |  |  |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |  |
| No exposure | 13.83 (25.08) | 6.26 (13.32) | 62.76 (74.71) | 214.04 (127.74) | 214.04 (127.74) | 187.66 (131.36) | 41.42 (82.94) | 10.01 (36.28) | <0.001 |
| Exposure | 17.19 (25.02) | 10.01 (22.52) | 58.85 (72.67) | 37.53 (43.79) | 268.62 (281.95) | 250.22 (162.64) | 107.40 (200.38) | 32.53 (142.62) |  |
| P-value | <0.001 |  | 0.5304 |  | <0.001 |  | <0.001 |  |  |
| **Division** |  |  |  |  |  |  |  |  |  |
| Barisal | 18.49 (28.36) | 7.51 (21.27) | 65.45 (67.90) | 37.53 (67.56) | 262.31 (255.19) | 250.22 (162.64) | 71.95 (151.54) | 18.77 (68.81) | <0.001 |
| Chittagong | 23.59 (28.91) | 12.51 (18.77) | 86.45 (97.89) | 62.55 (62.55) | 311.19 (192.37) | 262.73 (181.41) | 92.04 (149.02) | 25.02 (81.32) |  |
| Dhaka | 11.44 (19.50) | 6.26 (12.51) | 59.31 (60.36) | 37.53 (50.04) | 296.75 (320.65) | 250.22 (150.13) | 111.93 (227.87) | 25.02 (185.16) |  |
| Khulna | 13.34 (22.35) | 7.82 (10.01) | 31.97 (22.18) | 25.02 (30.65) | 187.91 (115.62) | 162.64 (125.11) | 79.00 (107.30) | 25.02 (116.35) |  |
| Mymensingh | - | - | - | - | - | - | - | - |  |
| Rajshahi | 12.74 (24.69) | 6.26 (11.89) | 37.16 (34.72) | 25.02 (37.53) | 192.03 (103.80) | 181.41 (125.11) | 67.51 (98.70) | 18.77 (106.34) |  |
| Rangpur | 10.89 (16.34) | 6.26 (12.26) | 52.03 (75.27) | 25.02 (50.04) | 182.69 (95.45) | 162.64 (125.11) | 52.79 (86.29) | 12.51 (53.80) |  |
| Sylhet | 13.37 (26.46) | 6.26 (15.01) | 85.22 (91.17) | 50.04 (100.09) | 390.55 (515.66) | 312.77 (200.18) | 72.98 (229.71) | 12.51 (36.28) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Place of residence** |  |  |  |  |  |  |  |  |  |
| Urban | 17.26 (26.63) | 6.54 (22.52) | 51.24 (69.90) | 37.53 (50.04) | 274.18 (291.40) | 250.22 (187.66) | 119.86 (217.26) | 37.53 (180.16) | <0.001 |
| Rural | 14.91 (24.62) | 6.26 (17.52) | 65.96 (74.90) | 37.53 (62.55) | 242.90 (226.30) | 200.18 (175.15) | 62.54 (132.87) | 12.51 (58.80) |  |
| P-value | 0.043 |  | 0.009 |  | 0.050 |  | <0.001 |  |  |
| **Religion** |  |  |  |  |  |  |  |  |  |
| Islam | 15.57 (25.52) | 6.26 (17.52) | 58.85 (71.20) | 37.53 (56.30) | 257.71 (236.72) | 225.20 (187.66) | 79.70 (156.63) | 18.77 (81.32) | 0.7421 |
| Others | 13.78 (18.93) | 6.26 (13.76) | 70.43 (90.64) | 37.53 (50.04) | 265.58 (431.03) | 200.18 (100.09) | 95.17 (256.43) | 25.02 (118.85) |  |
| P-value | 0.3410 |  | 0.2277 |  | 0.7732 |  | 0.0931 |  |  |

**Table S2: Factors Associated with various types of child delivery out-of-pocket cost in Bangladesh (US$) based on the 2014 BDHS Survey**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Delivery** | | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | |
|  | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** |
| **Delivery** |  |  |  |  |  |  |  |  |
| Home Delivery |  |  |  |  |  |  | Ref |  |
| Institutional Normal Delivery |  |  |  |  |  |  | 0.55 (0.03) | 0.000 |
| Cesarean section |  |  |  |  |  |  | 1.24 (0.02) | 0.000 |
| **Women’s age group** |  |  |  |  |  |  |  |  |
| 15‐19 | Ref |  | Ref |  | Ref |  | Ref |  |
| 20‐24 | -0.03 (0.04) | 0.478 | 0.10 (0.05) | 0.028 | -0.03 (0.03) | 0.251 | -0.01 (0.02) | 0.593 |
| 25‐34 | 0.02 (0.05) | 0.675 | 0.03 (0.06) | 0.512 | -0.00 (0.04) | 0.836 | 0.01 (0.03) | 0.882 |
| 35‐49 | 0.11 (0.06) | 0.058 | 0.06 (0.09) | 0.263 | 0.01 (0.04) | 0.717 | 0.07 (0.04) | 0.089 |
| **Women's education** |  |  |  |  |  |  |  |  |
| No education | Ref |  |  |  |  |  | Ref |  |
| Primary | -0.02 (0.04) | 0.712 |  |  |  |  | -0.02 (0.04) | 0.654 |
| Secondary | 0.00 (0.05) | 0.940 |  |  |  |  | 0.01 (0.04) | 0.892 |
| Higher | 0.06 (0.08) | 0.487 |  |  |  |  | 0.00 (0.05) | 0.931 |
| **Women’s working status** |  |  |  |  |  |  |  |  |
| Not working | Ref |  | Ref |  | Ref |  | Ref |  |
| Working | -0.07 (0.03) | 0.013 | -0.08 (0.04) | 0.037 | 0.00 (0.03) | 0.820 | -0.06 (0.02) | 0.002 |
| **Women’s BMI** |  |  |  |  |  |  |  |  |
| Underweight | Ref |  | Ref |  | Ref |  | Ref |  |
| Normal weight | 0.02 (0.03) | 0.442 | 0.08 (0.04) | 0.058 | 0.04 (0.03) | 0246 | 0.03 (0.02) | 0.138 |
| Overweight | 0.06 (0.04) | 0.154 | 0.07 (0.05) | 0.046 | 0.09 (0.03) | 0.003 | 0.07 (0.03) | 0.012 |
| Obese | 0.08 (0.07) | 0.217 | 0.13 (0.08) | 0.112 | 0.08 (0.04) | 0.053 | 0.08 (0.04) | 0.041 |
| **ANC visit** |  |  |  |  |  |  |  |  |
| No ANC | Ref |  |  |  |  |  | Ref |  |
| 1‐3 | 0.15 (0.03) | 0.000 |  |  |  |  | 0.11 (0.03) | 0.000 |
| ≥4 | 0.24 (0.04) | 0.000 |  |  |  |  | 0.18 (0.03) | 0.000 |
| **Husband age** |  |  |  |  |  |  |  |  |
| 15-29 | Ref |  | Ref |  | Ref |  | Ref |  |
| 30-44 | -0.02 (0.03) | 0.601 | 0.05 (0.04) | 0.186 | 0.02 (0.03) | 0.550 | -0.00 (0.02) | 0.969 |
| 45 or above | -0.03 (0.06) | 0.534 | 0.02 (0.09) | 0.732 | 0.07 (0.05) | 0.195 | 0.01 (0.04) | 0.873 |
| **Husband education** |  |  |  |  |  |  |  |  |
| No education | Ref |  | Ref |  |  |  | Ref |  |
| Primary | 0.01 (0.04) | 0.788 | 0.12 (0.06) | 0.063 |  |  | 0.03 (0.03) | 0.358 |
| Secondary | 0.00 (0.04) | 0.978 | 0.13 (0.06) | 0.032 |  |  | 0.02 (0.03) | 0.452 |
| Higher | 0.12 (0.07) | 0.095 | 0.26 (0.07) | 0.000 |  |  | 0.09 (0.04) | 0.030 |
| **Husband occupation** |  |  |  |  |  |  |  |  |
| Farmer | Ref |  | Ref |  | Ref |  | Ref |  |
| Agriculture | 0.02 (0.05) | 0.652 | -0.05 (0.07) | 0.545 | -0.01 (0.06) | 0.928 | -0.00 (0.04) | 0.945 |
| Day labor | 0.02 (0.05) | 0.631 | -0.14 (0.07) | 0.051 | 0.01 (0.05) | 0.891 | -0.00 (0.04) | 0.948 |
| Factory worker | 0.02 (0.06) | 0.781 | -0.01 (0.07) | 0.720 | 0.08 (0.04) | 0.032 | 0.02 (0.04) | 0.701 |
| Service holder | 0.04 (0.11) | 0.701 | -0.06 (0.07) | 0.629 | 0.08 (0.05) | 0.041 | 0.02 (0.05) | 0.653 |
| Business | -0.01 (0.05) | 0.862 | -0.07 (0.06) | 0.160 | 0.05 (0.03) | 0.156 | -0.01 (0.03) | 0.662 |
| Skilled worker | 0.03 (0.05) | 0.581 | -0.01 (0.06) | 0.879 | 0.01 (0.03) | 0.769 | 0.01 (0.03) | 0.857 |
| Other | 0.05 (0.08) | 0.596 | -0.10 (0.12) | 0.279 | 0.08 (0.05) | 0.105 | 0.02 (0.07) | 0.790 |
| **Household size** |  |  |  |  |  |  |  |  |
| ≤4 | Ref |  | Ref |  | Ref |  | Ref |  |
| >4 | 0.06 (0.03) | 0.082 | 0.06 (0.04) | 0.116 | 0.03 (0.03) | 0.349 | 0.05 (0.02) | 0.024 |
| **Wealth index** |  |  |  |  |  |  |  |  |
| Poor | Ref |  | Ref |  | Ref |  | Ref |  |
| Middle | -0.00 (0.04) | 0.952 | -0.04 (0.05) | 0.407 | -0.01 (0.03) | 0.628 | 0.00 (0.03) | 0.943 |
| Rich | 0.07 (0.05) | 0.107 | 0.01 (0.05) | 0.969 | 0.01 (0.04) | 0.767 | 0.05 (0.03) | 0.088 |
| **Birth order** |  |  |  |  |  |  |  |  |
| 1 | Ref |  | Ref |  | Ref |  | Ref |  |
| 2‐3 | -0.09 (0.03) | 0.014 | -0.15 (0.05) | 0.001 | 0.01 (0.03) | 0.837 | -0.07 (0.02) | 0.001 |
| ≥4 | -0.13 (0.05) | 0.021 | -0.21 (0.08) | 0.004 | -0.04 (0.05) | 0.475 | -0.12 (0.04) | 0.003 |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |
| No exposure | Ref |  | Ref |  | Ref |  | Ref |  |
| Exposure | -0.00 (0.03) | 0.886 | -0.07 (0.04) | 0.223 | 0.00 (0.03) | 0.843 | -0.01 (0.02) | 0.758 |
| **Division** |  |  |  |  |  |  |  |  |
| Barisal | Ref |  | Ref |  | Ref |  | Ref |  |
| Chittagong | 0.12 (0.05) | 0.012 | 0.15 (0.07) | 0.016 | 0.08 (0.05) | 0.147 | 0.11 (0.04) | 0.002 |
| Dhaka | -0.11 (0.06) | 0.057 | 0.05 (0.07) | 0.257 | -0.03 (0.04) | 0.427 | -0.05 (0.04) | 0.199 |
| Khulna | -0.13 (0.05) | 0.017 | -0.14 (0.07) | 0.082 | -0.17 (0.05) | 0.001 | -0.15 (0.04) | 0.000 |
| Mymensingh |  |  |  |  |  |  |  |  |
| Rajshahi | -0.10 (0.06) | 0.108 | -0.13 (0.08) | 0.156 | -0.13 (0.04) | 0.003 | -0.12 (0.04) | 0.004 |
| Rangpur | -0.15 (0.06) | 0.011 | -0.15 (0.08) | 0.168 | -0.17 (0.05) | 0.001 | -0.15 (0.04) | 0.000 |
| Sylhet | -0.04 (0.05) | 0.397 | 0.23 (0.08) | 0.001 | 0.08 (0.05) | 0.157 | 0.02 (0.04) | 0.666 |
| **Place of residence** |  |  |  |  |  |  |  |  |
| Urban | Ref |  | Ref |  | Ref |  | Ref |  |
| Rural | 0.02 (0.04) | 0.693 | 0.14 (0.04) | 0.000 | 0.01 (0.02) | 0.705 | 0.04 (0.02) | 0.050 |
| **Religion** |  |  |  |  |  |  |  |  |
| Islam | Ref |  | Ref |  | Ref |  | Ref |  |
| Others | 0.07 (0.05) | 0.183 | 0.02 (0.05) | 0.736 | 0.00 (0.04) | 0.984 | 0.03 (0.03) | 0.258 |
| N | 2,134 |  | 671 |  | 1042 |  | 3846 |  |
| Mean VIF | 1.84 |  | 2.12 |  | 2.08 |  | 2.04 |  |
| **R2** | 9.90% |  | 24.73% |  | 14.13% |  | 55.48% |  |
| **Adjusted R2** | 7.77% |  | 17.83% |  | 13.33% |  | 61.89% |  |
| **AIC** | 3467.76 |  | 687.7711 |  | 426.0461 |  | 5043.062 |  |
| **BIC** | 3688.724 |  | 841.0692 |  | 597.5214 |  | 5299.508 |  |
| **RMSE** | 0.54 |  | 0.39 |  | 0.29 |  | 0.46 |  |
| **F value, (Prob > F)** | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |

**Table S3: Distribution of out-of-pocket costs for various types of child delivery in Bangladesh (US$) based on the 2017-18 BDHS Survey**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Delivery** | | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | | **P-value** |
|  | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** |  |
| **Age** | 25.07 (5.62) | 24.00 (21.00) | 24.18 (5.48) | 23.00 (20.00) | 25.18 (5.50) | 24.00 (21.00) | 24.96 (5.57) | 24.00 (21.00) | 0.057 |
| **Women’s age group** |  |  |  |  |  |  |  |  |  |
| 15‐19 | 17.13 (18.49) | 11.59 (19.31) | 70.19 (73.91) | 51.50 (51.50) | 227.09 (112.62) | 218.87 (141.62) | 89.76 (114.98) | 38.62 (118.45) | <0.001 |
| 20‐24 | 17.32 (37.14) | 10.30 (17.38) | 74.25 (73.22) | 55.36 (64.37) | 264.12 (156.77) | 257.50 (167.37) | 112.68 (150.53) | 38.62 (182.82) |  |
| 25‐34 | 15.46 (23.43) | 7.72 (16.74) | 64.61 (87.37) | 43.77 (51.50) | 291.07 (275.86) | 257.50 (180.25) | 114.51 (205.52) | 29.90 (172.52) |  |
| 35‐49 | 16.73 (35.79) | 7.72 (16.74) | 66.97 (71.34) | 43.77 (51.50) | 294.40 (205.55) | 257.50 (206.00) | 120.61 (180.65) | 28.32 (186.11) |  |
| P-value | 0.697 |  | 0.539 |  | <0.001 |  | <0.001 |  |  |
| **Women's education** |  |  |  |  |  |  |  |  |  |
| No education | 10.79 (18.03) | 6.44 (10.94) | 60.73 (59.54) | 36.05 (70.81) | 219.24 (139.74) | 199.56 (109.44) | 48.63 (96.45) | 7.78 (26.39) | 0.051 |
| Primary | 13.45 (19.19) | 7.08 (14.16) | 61.21 (58.73) | 38.62 (55.36) | 253.21 (159.27) | 222.09 (180.25) | 63.33 (115.86) | 12.87 (57.94) |  |
| Secondary | 19.60 (40.50) | 12.87 (20.60) | 68.04 (80.37) | 51.50 (51.50) | 263.78 (225.23) | 235.61 (167.37) | 111.71 (177.15) | 38.62 (154.50) |  |
| Higher | 22.67 (21.85) | 16.09 (19.31) | 87.00 (87.21) | 64.37 (83.69) | 297.85 (182.48) | 257.50 (193.12) | 203.99 (191.38) | 193.12 (280.03) |  |
| P-value | <0.001 |  | 0.012 |  | <0.001 |  | <0.001 |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |  |  |
| Not working | 18.09 (36.44) | 10.30 (21.89) | 73.45 (73.17) | 52.79 (64.37) | 284.65 (219.54) | 257.50 (186.69) | 129.37 (187.33) | 51.50 (186.69) | <0.001 |
| Working | 14.90 (22.25) | 7.72 (16.74) | 62.87 (82.90) | 38.62 (43.77) | 241.88 (142.78) | 218.87 (167.37) | 80.49 (125.68) | 20.60 (114.59) |  |
| P-value | 0.012 |  | 0.057 |  | <0.001 |  | <0.001 |  |  |
| **Women’s BMI** |  |  |  |  |  |  |  |  |  |
| Underweight | 12.97 (17.87) | 7.72 (12.87) | 63.52 (55.05) | 38.62 (59.22) | 228.69 (131.55) | 193.12 (154.50) | 69.30 (109.77) | 19.31 (83.69) | <0.001 |
| Normal weight | 16.39 (23.62) | 9.01 (18.02) | 67.34 (68.67) | 45.06 (51.50) | 255.80 (172.51) | 247.20 (167.37) | 87.78 (138.63) | 25.75 (121.67) |  |
| Overweight | 18.81 (43.13) | 9.42 (22.53) | 75.89 (102.57) | 51.50 (51.50) | 281.78 (174.21) | 257.50 (231.75) | 138.36 (174.25) | 64.37 (218.87) |  |
| Obese | 22.24 (53.02) | 12.87 (19.96) | 73.49 (59.11) | 60.51 (55.36) | 308.16 (294.59) | 257.50 (193.12) | 192.91 (261.97) | 128.75 (231.75) |  |
| P-value | 0.002 |  | 0.403 |  | <0.001 |  | <0.001 |  |  |
| **ANC visit** |  |  |  |  |  |  |  |  |  |
| No ANC | 10.47 (15.69) | 6.44 (11.59) | 62.03 (50.83) | 51.50 (79.18) | 263.97 (106.32) | 257.50 (128.75) | 26.35 (62.89) | 6.94 (17.38) | <0.001 |
| 1‐3 | 16.93 (36.70) | 9.01 (15.45) | 68.16 (67.78) | 51.50 (51.50) | 242.76 (128.65) | 231.75 (128.75) | 77.40 (117.74) | 21.89 (96.56) |  |
| ≥4 | 18.94 (24.96) | 12.87 (20.60) | 71.42 (84.89) | 51.50 (51.50) | 285.30 (225.72) | 257.50 (220.81) | 155.23 (203.37) | 84.33 (238.19) |  |
| P-value | <0.001 |  | 0.724 |  | <0.001 |  | <0.001 |  |  |
| **Husband age** |  |  |  |  |  |  |  |  |  |
| 15-29 | 16.38 (35.90) | 10.30 (15.45) | 70.98 (70.48) | 51.50 (47.38) | 239.21 (134.33) | 218.87 (167.37) | 89.28 (125.82) | 25.75 (121.02) | <0.001 |
| 30-44 | 17.23 (29.35) | 8.37 (18.02) | 70.98 (82.42) | 51.50 (64.37) | 282.65 (214.19) | 257.50 (212.44) | 122.87 (182.53) | 38.62 (184.11) |  |
| 45 or above | 13.88 (20.92) | 6.44 (18.01) | 59.96 (67.31) | 38.62 (38.62) | 303.93 (268.10) | 257.50 (206.00) | 110.98 (200.42) | 25.75 (154.50) |  |
| P-value | 0.339 |  | 0.578 |  | <0.001 |  | <0.001 |  |  |
| **Husband education** |  |  |  |  |  |  |  |  |  |
| No education | 12.34 (16.84) | 6.44 (13.52) | 59.92 (68.01) | 38.62 (54.07) | 251.46 (176.36) | 57.16 (115.89) | 12.87 (38.43) | 15.75 (30.20) | <0.001 |
| Primary | 15.75 (30.20) | 7.72 (16.74) | 64.80 (86.19) | 38.62 (51.50) | 238.77 (136.20) | 206.00 (141.62) | 72.74 (117.84) | 19.31 (83.69) |  |
| Secondary | 19.87 (40.60) | 12.87 (19.31) | 70.15 (62.47) | 51.50 (51.50) | 265.73 (194.82) | 257.50 (167.37) | 116.92 (165.72) | 38.62 (180.25) |  |
| Higher | 20.10 (19.96) | 12.87 (19.31) | 84.41 (89.59) | 64.37 (70.81) | 303.56 (239.60) | 257.50 (193.12) | 206.20 (229.50) | 167.37 (283.25) |  |
| P-value | <0.001 |  | 0.044 |  | <0.001 |  | <0.001 |  |  |
| **Husband occupation** |  |  |  |  |  |  |  |  |  |
| Not working | 15.98 (24.45) | 6.44 (12.36) | 92.27 (83.41) | 64.37 (115.87) | 287.21 (157.72) | 244.62 (257.50) | 146.61 (158.19) | 96.69 (218.87) | 0.008 |
| Farmer | 15.83 (29.61) | 7.72 (16.74) | 61.46 (52.77) | 45.06 (64.37) | 236.90 (165.95) | 193.12 (150.64) | 73.96 (124.57) | 19.31 (96.56) |  |
| Agriculture | 12.41 (15.10) | 7.08 (17.83) | 100.78 (163.08) | 64.37 (75.96) | 212.41 (115.96) | 193.12 (148.06) | 55.91 (104.52) | 12.87 (47.64) |  |
| Day labor | 13.59 (18.74) | 7.08 (14.16) | 61.35 (70.45) | 45.06 (38.62) | 243.25 (136.79) | 231.75 (141.62) | 62.95 (109.07) | 13.00 (57.94) |  |
| Factory worker | 21.08 (55.73) | 11.59 (21.89) | 68.31 (59.51) | 64.37 (64.37) | 281.98 (212.69) | 257.50 (167.37) | 121.61 (179.90) | 45.06 (180.25) |  |
| Service holder | 20.30 (16.85) | 16.74 (21.01) | 89.65 (97.33) | 64.37 (96.56) | 312.77 (187.24) | 270.37 (193.12) | 235.72 (200.65) | 218.87 (270.37) |  |
| Business | 16.94 (22.52) | 10.30 (16.99) | 71.00 (68.71) | 53.43 (64.37) | 280.64 (237.66) | 257.50 (179.71) | 129.44 (195.07) | 51.50 (180.25) |  |
| Skilled worker | 18.24 (32.87) | 11.59 (19.31) | 66.30 (70.57) | 38.62 (43.77) | 264.60 (197.14) | 244.62 (167.37) | 110.96 (164.45) | 38.62 (168.66) |  |
| Other | 11.94 (14.84) | 6.44 (11.46) | 14.16 (1.82) | 14.16 (2.57) | 241.41 (76.80) | 270.37 (96.56) | 55.86 (97.70) | 12.87 (19.31) |  |
| P-value | 0.022 |  | 0.064 |  | 0.003 |  | <0.001 |  |  |
| **Household size** |  |  |  |  |  |  |  |  |  |
| ≤4 | 17.58 (38.35) | 9.98 (21.24) | 65.01 (55.86) | 51.50 (51.50) | 268.39 (241.71) | 256.02 (167.37) | 115.73 (188.42) | 38.62 (182.82) | 0.628 |
| >4 | 16.30 (27.49) | 8.37 (16.74) | 71.72 (84.36) | 51.50 (51.50) | 274.12 (178.79) | 257.50 (180.25) | 108.81 (158.98) | 32.19 (172.52) |  |
| P-value | 0.357 |  | 0.246 |  | 0.590 |  | 0.187 |  |  |
| **Wealth index** |  |  |  |  |  |  |  |  |  |
| Poor | 14.31 (31.41) | 7.47 (15.45) | 60.30 (63.29) | 38.62 (42.49) | 238.27 (174.74) | 206.00 (125.53) | 59.81 (116.17) | 12.87 (45.19) | <0.001 |
| Middle | 17.70 (19.68) | 12.87 (19.31) | 77.31 (96.93) | 64.37 (61.16) | 234.78 (130.73) | 231.75 (173.81) | 96.42 (128.21) | 38.62 (119.74) |  |
| Rich | 21.70 (36.05) | 12.87 (19.31) | 73.82 (76.69) | 51.50 (64.37) | 294.90 (222.08) | 257.50 (206.00) | 171.60 (207.28) | 128.75 (231.75) |  |
| P-value | <0.001 |  | 0.029 |  | <0.001 |  | <0.001 |  |  |
| **Birth order** |  |  |  |  |  |  |  |  |  |
| 1 | 20.57 (39.05) | 12.87 (19.31) | 72.90 (71.72) | 51.50 (60.51) | 264.11 (164.37) | 257.50 (167.37) | 131.59 (159.42) | 64.37 (189.26) | 0.074 |
| 2‐3 | 15.01 (22.55) | 7.72 (16.74) | 68.61 (83.81) | 45.06 (51.50) | 281.15 (236.36) | 257.50 (206.00) | 108.38 (183.37) | 25.75 (160.42) |  |
| ≥4 | 15.15 (36.54) | 6.44 (13.52) | 59.63 (67.00) | 38.62 (43.77) | 264.34 (143.24) | 257.50 (170.59) | 56.39 (108.44) | 12.87 (35.41) |  |
| P-value | <0.001 |  | 0.339 |  | 0.233 |  | <0.001 |  |  |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |  |
| No exposure | 14.95 (32.11) | 7.72 (16.74) | 70.59 (90.86) | 51.50 (51.50) | 267.96 (152.59) | 257.50 (173.81) | 69.11 (123.39) | 15.45 (57.94) | 0.843 |
| Exposure | 18.36 (29.71) | 12.87 (20.08) | 69.24 (68.91) | 51.50 (51.50) | 273.35 (211.73) | 257.50 (167.37) | 135.42 (185.59) | 64.37 (206.00) |  |
| P-value | 0.007 |  | 0.811 |  | 0.665 |  | <0.001 |  |  |
| **Division** |  |  |  |  |  |  |  |  |  |
| Barisal | 17.52 (20.74) | 10.30 (21.89) | 86.43 (84.39) | 64.37 (77.25) | 349.26 (335.12) | 321.87 (154.50) | 117.61 (228.53) | 25.75 (185.40) | <0.001 |
| Chittagong | 21.03 (23.76) | 12.87 (19.31) | 89.63 (90.36) | 64.37 (64.37) | 320.68 (156.09) | 283.25 (160.94) | 117.48 (158.67) | 38.62 (180.25) |  |
| Dhaka | 22.15 (66.46) | 12.87 (21.89) | 77.63 (62.79) | 64.37 (69.52) | 299.25 (244.58) | 257.50 (206.00) | 153.97 (215.04) | 64.37 (244.62) |  |
| Khulna | 16.67 (17.03) | 12.87 (19.31) | 69.07 (113.88) | 38.62 (38.62) | 203.78 (96.90) | 193.12 (128.75) | 110.60 (118.95) | 64.37 (167.37) |  |
| Mymensingh | 12.27 (15.96 | 7.72 (12.87) | 53.80 (53.20) | 38.62 (45.06) | 258.85 (216.49) | 257.50 (141.62) | 86.46 (158.30) | 19.31 (122.31) |  |
| Rajshahi | 14.81 (25.21 | 6.44 (18.02) | 47.50 (44.45) | 34.12 (41.20) | 193.75 (107.45) | 180.25 (128.75) | 89.31 (109.69) | 38.62 (146.77) |  |
| Rangpur | 15.33 (29.73) | 7.72 (16.74) | 47.82 (39.52) | 36.37 (45.06) | 219.24 (120.73) | 193.12 (128.75) | 86.29 (116.62) | 25.75 (121.02) |  |
| Sylhet | 12.95 (18.93) | 6.44 (13.71) | 75.53 (80.01) | 51.50 (64.37) | 345.23 (182.74) | 321.87 (231.75) | 110.59 173.42) | 24.46 (126.82) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Place of residence** |  |  |  |  |  |  |  |  |  |
| Urban | 17.30 (23.01) | 11.59 (18.73) | 63.99 (68.58) | 38.62 (51.50) | 286.70 (256.48) | 257.50 (231.75) | 144.09 (214.15) | 64.37 (213.72) | <0.001 |
| Rural | 16.45 (33.24) | 7.72 (16.74) | 73.41 (81.70) | 51.50 (64.37) | 260.53 (140.30) | 257.50 (154.50) | 93.60 (135.55) | 25.75 (135.19) |  |
| P-value | 0.559 |  | 0.083 |  | 0.009 |  | <0.001 |  |  |
| **Religion** |  |  |  |  |  |  |  |  |  |
| Islam | 16.79 (31.33) | 9.01 (17.65) | 67.87 (69.32) | 51.50 (51.50) | 276.16 (208.41) | 257.50 (193.12) | 110.46 (171.28) | 32.19 (172.52) | <0.001 |
| Others | 14.83 (25.06) | 6.44 (13.52) | 83.23 (118.61) | 52.79 (64.37) | 235.86 (108.49) | 231.75 (128.75) | 115.54 (133.02) | 64.37 (182.82) |  |
| P-value | 0.443 |  | 0.062 |  | 0.017 |  | 0.557 |  | <0.001 |

**Table S4: Factors Associated with various types of child delivery out-of-pocket cost in Bangladesh (US$) based on the 2017-18 BDHS Survey**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Delivery** | | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | |
|  | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** |
| **Delivery** |  |  |  |  |  |  |  |  |
| Home Delivery |  |  |  |  |  |  | Ref |  |
| Institutional Normal Delivery |  |  |  |  |  |  | 0.71 (0.02) | 0.000 |
| Cesarean section |  |  |  |  |  |  | 1.32 (0.02) | 0.000 |
| **Women’s age group** |  |  |  |  |  |  |  |  |
| 15‐19 | Ref |  | Ref |  | Ref |  | Ref |  |
| 20‐24 | 0.06 (0.04) | 0.190 | -0.02 (0.04) | 0.983 | 0.01 (0.02) | 0.454 | 0.01 (0.02) | 0.538 |
| 25‐34 | 0.09 (0.06) | 0.136 | -0.09 (0.05) | 0.233 | -0.01 (0.03) | 0.639 | 0.02 (0.03) | 0.456 |
| 35‐49 | 0.14 (0.07) | 0.056 | -0.09 (0.07) | 0.404 | 0.03 (0.03) | 0.103 | 0.06 (0.03) | 0.057 |
| **Women's education** |  |  |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |  |  |
| Primary |  |  |  |  |  |  |  |  |
| Secondary |  |  |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |  |
| Not working | Ref |  | Ref |  | Ref |  | Ref |  |
| Working | -0.03 (0.03) | 0.417 | -0.02 (0.03) | 0.376 | -0.01 (0.02) | 0.751 | -0.02 (0.02) | 0.286 |
| **Women’s BMI** |  |  |  |  |  |  |  |  |
| Underweight | Ref |  | Ref |  | Ref |  | Ref |  |
| Normal weight | 0.03 (0.04) | 0.331 | -0.01 (0.04) | 0.458 | 0.02 (0.02) | 0.298 | 0.03 (0.02) | 0.125 |
| Overweight | 0.04 (0.04) | 0.338 | -0.02 (0.04) | 0.511 | 0.05 (0.03) | 0.021 | 0.04 (0.03) | 0.035 |
| Obese | 0.06 (0.06) | 0.158 | -0.02 (0.07) | 0.643 | 0.05 (0.03) | 0.037 | 0.05 (0.03) | 0.019 |
| **ANC visit** |  |  |  |  |  |  |  |  |
| No ANC | Ref |  |  |  |  |  |  |  |
| 1‐3 | 0.14 (0.04) | 0.000 |  |  |  |  |  |  |
| ≥4 | 0.17 (0.05) | 0.000 |  |  |  |  |  |  |
| **Husband age** |  |  |  |  |  |  |  |  |
| 15-29 | Ref |  | Ref |  | Ref |  | Ref |  |
| 30-44 | 0.07 (0.04) | 0.041 | 0.01 (0.03) | 0.930 | 0.01 (0.02) | 0.393 | 0.03 (0.02) | 0.113 |
| 45 or above | -0.00 (0.07) | 0.742 | 0.04 (0.07) | 0.649 | 0.01 (0.04) | 0.684 | -0.01 (0.04) | 0.752 |
| **Husband education** |  |  |  |  |  |  |  |  |
| No education | Ref |  | Ref |  |  |  | Ref |  |
| Primary | 0.02 (0.04) | 0.098 | -0.03 (0.06) | 0.543 |  |  | 0.03 (0.03) | 0.042 |
| Secondary | 0.05 (0.04) | 0.006 | 0.03 (0.06) | 0.566 |  |  | 0.04 (0.03 ) | 0.001 |
| Higher | 0.04 (0.06) | 0.018 | 0.06 (0.07) | 0.179 |  |  | 0.05 (0.03) | 0.000 |
| **Husband occupation** |  |  |  |  |  |  |  |  |
| Not working |  |  |  |  |  |  |  |  |
| Farmer |  |  |  |  |  |  |  |  |
| Agriculture |  |  |  |  |  |  |  |  |
| Day labor |  |  |  |  |  |  |  |  |
| Factory worker |  |  |  |  |  |  |  |  |
| Service holder |  |  |  |  |  |  |  |  |
| Business |  |  |  |  |  |  |  |  |
| Skilled worker |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |
| **Household size** |  |  |  |  |  |  |  |  |
| ≤4 | Ref |  | Ref |  | Ref |  | Ref |  |
| >4 | -0.01 (0.03) | 0.710 | -0.04 (0.03) | 0.204 | -0.00 (0.02) | 0.976 | -0.02 (0.02) | 0.260 |
| **Wealth index** |  |  |  |  |  |  |  |  |
| Poor | Ref |  | Ref |  | Ref |  | Ref |  |
| Middle | 0.08 (0.04) | 0.030 | 0.09 (0.05) | 0.058 | -0.04 (0.02) | 0.301 | 0.05 (0.02) | 0.004 |
| Rich | 0.09 (0.04) | 0.009 | 0.07 (0.04) | 0.108 | 0.01 (0.02) | 0.004 | 0.06 (0.02) | 0.000 |
| **Birth order** |  |  |  |  |  |  |  |  |
| 1 | Ref |  | Ref |  | Ref |  | Ref |  |
| 2‐3 | -0.20 (0.04) | 0.000 | -0.01 (0.04) | 0.437 | 0.01 (0.02) | 0.382 | -0.09 (0.02) | 0.000 |
| ≥4 | -0.19 (0.06) | 0.000 | -0.04 (0.06) | 0.433 | -0.01 (0.05) | 0.176 | -0.09 (0.04) | 0.000 |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |
| No exposure | Ref |  | Ref |  | Ref |  | Ref |  |
| Exposure | 0.03 (0.03) | 0.166 | -0.04 (0.03) | 0.303 | -0.02 (0.02) | 0.385 | 0.01 (0.02) | 0.243 |
| **Division** |  |  |  |  |  |  |  |  |
| Barisal | Ref |  | Ref |  | Ref |  | Ref |  |
| Chittagong | 0.07 (0.05) | 0.138 | 0.03 (0.07) | 0.803 | -0.03 (0.02) | 0.088 | 0.03 (0.03) | 0.234 |
| Dhaka | -0.08 (0.06) | 0.135 | 0.02 (0.07) | 0.781 | -0.12 (0.03) | 0.000 | -0.07 (0.04) | 0.032 |
| Khulna | 0.00 (0.06) | 0.813 | -0.11 (0.07) | 0.109 | -0.20 (0.03) | 0.000 | -0.11 (0.03) | 0.004 |
| Mymensingh | -0.13 (0.06) | 0.015 | -0.19 (0.08) | 0.014 | -0.13 (0.03) | 0.000 | -0.14 (0.04) | 0.000 |
| Rajshahi | -0.25 (0.06) | 0.000 | -0.26 (0.08) | 0.002 | -0.25 (0.03) | 0.000 | -0.24 (0.04) | 0.000 |
| Rangpur | -0.15 (0.07) | 0.016 | -0.23 (0.07) | 0.002 | -0.21 (0.03) | 0.000 | -0.18 (0.04) | 0.000 |
| Sylhet | -0.18 (0.06) | 0.002 | -0.07 (0.08) | 0.251 | -0.00 (0.03) | 0.366 | -0.12 (0.04) | 0.002 |
| **Place of residence** |  |  |  |  |  |  |  |  |
| Urban | Ref |  | Ref |  | Ref |  | Ref |  |
| Rural | -0.03 (0.04) | 0.579 | 0.11 (0.03) | 0.000 | 0.02 (0.02) | 0.468 | 0.02 (0.02) | 0.383 |
| **Religion** |  |  |  |  |  |  |  |  |
| Islam | Ref |  | Ref |  | Ref |  | Ref |  |
| Others | -0.04 (0.06) | 0.539 | 0.04 (0.05) | 0.262 | -0.04 (0.02) | 0.140 | -0.02 (0.03) | 0.612 |
| N | 2,352 |  | 815 |  | 1599 |  | 4,779 |  |
| Mean VIF | 1.91 |  | 2.13 |  | 2.05 |  | 1.96 |  |
| **R2** | 10.55% |  | 13.68% |  | 11.77% |  | 66.67% |  |
| **Adjusted R2** | 8.90% |  | 8.13% |  | 12.64% |  | 66.80% |  |
| **AIC** | 4170.37 |  | 770.83 |  | 480.58 |  | 6456.85 |  |
| **BIC** | 4343.33 |  | 902.59 |  | 615.16 |  | 6651.01 |  |
| **RMSE** | 0.58 |  | 0.38 |  | 0.28 |  | 0.47 |  |
| **F value, (Prob > F)** | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |

**Table S5: Distribution of out-of-pocket costs for various types of child delivery in Bangladesh (US$) based on the 2022 BDHS Survey**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | | **P-value** |
|  | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** | **Mean (SD)** | **Median (IQR)** |  |
| **Age** | 25.32 (5.50) | 25.00 (21.00 | 25.79 (5.61) | 25.00 21.00 | 25.65 (5.58 | 25.00 (21.00) | 0.030 |
| **Women’s age group** |  |  |  |  |  |  |  |
| 15‐19 | 88.26 (111.14) | 58.96 (82.54) | 248.91 (129.90) | 235.82 (141.49) | 196.73 (145.08) | 176.87 (212.24) | 0.003 |
| 20‐24 | 96.22 (132.04) | 58.96 (82.54) | 268.16 (144.34) | 235.82 (176.87) | 215.86 (161.38) | 200.45 (200.45) |  |
| 25‐34 | 92.97 (120.02) | 58.96 (82.54) | 306.52 (178.40) | 294.78 (176.87) | 244.27 (190.14) | 235.82 (259.40) |  |
| 35‐49 | 91.40 (108.97) | 58.96 (82.54) | 301.54 (189.43) | 259.40 (176.87) | 243.35 (195.10) | 235.82 (259.40) |  |
| P-value | 0.922 |  | <0.001 |  | <0.001 |  |  |
| **Women's education** |  |  |  |  |  |  |  |
| No education | 67.65 (70.68) | 41.27 (53.06 | 248.11 (164.59) | 235.82 (141.49) | 167.16 (158.65) | 117.91 (194.55) | 0.648 |
| Primary | 88.01 (115.34) | 58.96 (70.75 | 272.86 (167.06) | 235.82 (176.87) | 199.81 (174.02) | 176.87 (235.82) |  |
| Secondary | 89.80 (122.70) | 58.96 (82.54 | 272.12 (156.05) | 235.82 (176.87) | 217.18 (168.95 | 188.66 (200.45) |  |
| Higher | 116.74 (128.49) | 70.75 (70.75 | 318.47 (180.03) | 294.78 (212.24) | 277.54 (189.08 | 235.82 (212.24) |  |
| P-value | 0.024 |  | <0.001 |  | <0.001 |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |
| Not working | 93.89 (113.04) | 58.96 (82.54 | 286.57 (159.36) | 235.82 (176.87) | 230.06 (171.42 | 212.24 (229.93) | 0.828 |
| Working | 89.71 (146.06) | 53.06 (53.06 | 279.15 (193.69) | 235.82 (176.87) | 220.40 (200.37 | 176.87 (224.03) |  |
| P-value | 0.220 |  | 0.404 |  | 0.665 |  |  |
| **Women’s BMI** |  |  |  |  |  |  |  |
| Underweight | 104.14 (124.89) | 58.96 (88.43 | 269.91 (133.59) | 235.82 (176.87) | 207.96 (152.92) | 176.87 (247.61) | 0.070 |
| Normal weight | 104.50 (146.57) | 58.96 (82.54 | 270.48 (153.12) | 235.82 (176.87) | 215.15 (169.96) | 176.87 (212.24) |  |
| Overweight | 83.06 (86.82) | 58.96 (70.75 | 281.41 (164.12) | 235.82 (176.87) | 229.52 (171.62) | 224.03 (194.55) |  |
| Obese | 89.80 (116.46) | 58.96 (76.64 | 292.10 (173.47) | 235.82 (176.87) | 234.11 (183.62) | 212.24 (224.03) |  |
| P-value | 0.283 |  | 0.082 |  | 0.047 |  |  |
| **ANC visit** |  |  |  |  |  |  |  |
| No ANC | 83.41 (96.98) | 47.16 (94.33 | 248.76 (138.03) | 235.82 (129.70) | 168.16 (145.22) | 141.49 (229.93) | 0.439 |
| 1‐3 | 85.55 (112.68) | 58.96 (58.96 | 269.03 (162.84) | 235.82 (176.87) | 207.79 (171.42) | 176.87 (218.13) |  |
| ≥4 | 102.85 (130.60) | 58.96 (82.54 | 299.37 (169.04) | 259.40 (176.87) | 249.53 (181.54) | 235.82 (235.82) |  |
| P-value | 0.085 |  | <0.001 |  | <0.001 |  |  |
| **Place of delivery** |  |  |  |  |  |  |  |
| Public facility | 71.37 (107.10) | 47.16 (47.16 | 239.86 (199.46) | 176.87 (194.55) | 133.13 (168.57) | 70.75 (141.49) | 0.914 |
| Private/NGO facility | 122.53 (131.22) | 82.54 (82.54 | 292.50 (159.37) | 247.61 (176.87) | 263.19 (167.65) | 235.82 (200.45) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband age** |  |  |  |  |  |  |  |
| 15-29 | 82.69 (97.91) | 58.96 (58.96 | 255.86 (143.06) | 235.82 (176.87) | 198.66 (153.29) | 176.87 (224.03) | 0.031 |
| 30-44 | 101.16 (136.59) | 58.96 (82.54 | 296.57 (172.89) | 259.40 (176.87) | 242.58 (185.51) | 235.82 (235.82) |  |
| 45 or above | 78.17 (76.04) | 58.96 (64.85 | 309.61 (187.51) | 294.78 (212.24) | 232.14 (192.97) | 212.24 (282.99) |  |
| P-value | 0.048 |  | <0.001 |  | <0.001 |  |  |
| **Husband education** |  |  |  |  |  |  |  |
| No education | 68.46 (65.26) | 50.11 (53.06 | 289.52 (206.58 | 235.82 (176.87) | 197.63 (196.35) | 165.07 (235.82) | 0.116 |
| Primary | 83.97 (114.55) | 58.96 (64.85 | 254.86 (136.58) | 235.82 (159.18) | 193.74 (152.88) | 176.87 (212.24) |  |
| Secondary | 94.75 (112.94) | 58.96 (82.54 | 281.15 (162.93) | 235.82 (176.87) | 225.85 (172.33) | 200.45 (188.66) |  |
| Higher | 122.71 (164.76) | 58.96 (76.64 | 311.41 (174.93) | 294.78 (224.03) | 273.46 (188.68) | 235.82 (212.24) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband occupation** |  |  |  |  |  |  |  |
| Not working | 100.78 (89.40) | 70.75 (82.54 | 330.99 (237.16) | 259.40 (176.87) | 259.29 (228.88) | 188.66 (235.82) | 0.159 |
| Farmer | 87.18 (128.55) | 58.96 (58.96 | 233.82 (133.21) | 235.82 (141.49) | 191.73 (147.44) | 176.87 (165.07) |  |
| Agriculture | 81.81 (96.17) | 58.96 (41.27 | 240.06 (127.59) | 235.82 (117.91) | 180.90 (139.59) | 176.87 (176.87) |  |
| Day labor | 86.38 (135.72) | 53.06 (58.96 | 261.10 (168.47) | 235.82 (153.28) | 195.18 (178.16) | 176.87 (188.66) |  |
| Factory worker | 104.61 (132.32) | 58.96 (82.54 | 287.81 (142.67) | 259.40 (165.07) | 236.48 (162.21) | 235.82 (212.24) |  |
| Service holder | 121.71 (152.44) | 70.75 (70.75 | 334.56 (188.33) | 294.78 (218.13) | 296.92 (199.60) | 294.78 (259.40) |  |
| Business | 94.93 (122.27) | 70.75 (82.54 | 302.57 (182.77) | 259.40 (176.87) | 244.70 (192.12) | 235.82 (235.82) |  |
| Skilled worker | 79.57 (94.12) | 58.96 (53.06 | 269.25 (153.98) | 235.82 (176.87) | 204.85 (163.48) | 176.87 (224.03) |  |
| Other | 103.44 (119.24) | 58.96 (70.75 | 229.36 (108.35) | 235.82 (153.28) | 186.08 (125.91) | 170.97 (218.13) |  |
| P-value | 0.346 |  | <0.001 |  | <0.001 |  |  |
| **Household size** |  |  |  |  |  |  |  |
| ≤4 | 86.81 (106.48) | 58.96 (82.54 | 279.17 (168.40) | 235.82 (176.87) | 225.11 (176.19) | 200.45 (200.45) | 0.997 |
| >4 | 95.88 (126.37) | 58.96 (82.54 | 288.19 (165.51) | 235.82 (176.87) | 229.66 (178.16) | 212.24 (224.03) |  |
| P-value | 0.281 |  | 0.223 |  | 0.494 |  |  |
| **Wealth index** |  |  |  |  |  |  |  |
| Poor | 77.94 (89.89) | 58.96 (64.85 | 258.96 (152.79) | 235.82 (176.87) | 190.43 (158.96 | 176.87 (188.66) | 0.690 |
| Middle | 79.85 (75.54) | 58.96 (82.54 | 274.99 (159.24) | 235.82 (176.87) | 214.37 (165.53 | 188.66 (212.24) |  |
| Rich | 114.39 (156.84) | 69.57 (82.54) | 301.94 (173.69) | 271.19 (176.87) | 256.76 (187.74) | 235.82 (235.82) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Birth order** |  |  |  |  |  |  |  |
| 1 | 97.35 (117.64) | 58.96 (82.54 | 279.28 (164.26) | 235.82 (176.87) | 227.57 (173.12) | 200.45 (194.55) | 0.317 |
| 2‐3 | 88.60 (127.13) | 58.96 (76.64 | 288.97 (168.48) | 235.82 (176.87) | 232.45 (181.83) | 212.24 (235.82) |  |
| ≥4 | 95.47 (102.27) | 58.96 (82.54 | 296.62 (167.06) | 277.09 (176.87) | 202.33 (172.52) | 176.87 (235.82) |  |
| P-value | 0.564 |  | 0.316 |  | 0.082 |  |  |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |
| No exposure | 86.47 (112.62) | 58.96 (64.85 | 235.82 (176.87) | 235.82 (176.87) | 197.35 (170.34) | 176.87 (229.93) | 0.155 |
| Exposure | 97.52 (125.50) | 58.96 (82.54 | 293.27 (166.76) | 247.61 (176.87) | 242.61 (178.98) | 235.82 (235.82) |  |
| P-value | 0.165 |  | <0.001 |  | < 0.001 |  |  |
| **Division** |  |  |  |  |  |  |  |
| Barisal | 112.78 (114.29) | 58.96 (82.54 | 324.05 (181.28) | 294.78 (153.28) | 270.58 (190.42) | 235.82 (206.34) | <0.001 |
| Chittagong | 104.58 (86.44) | 76.64 (67.80 | 327.22 (163.37) | 294.78 (117.91) | 230.16 (174.62) | 212.24 (271.19) |  |
| Dhaka | 121.85 (215.19) | 58.96 (82.54 | 304.19 (173.67) | 259.40 (153.28) | 261.12 (199.76) | 235.82 (235.82) |  |
| Khulna | 70.95 (107.76) | 41.27 (53.06 | 243.67 (162.45) | 235.82 (153.28) | 207.23 (167.98) | 176.87 (165.07) |  |
| Mymensingh | 69.52 (86.14) | 47.16 (58.96 | 284.17 (138.54) | 259.40 (176.87) | 231.63 (157.55) | 235.82 (235.82) |  |
| Rajshahi | 73.57 (68.77) | 58.96 (47.16 | 226.66 (119.92) | 212.24 (153.28) | 190.56 (127.75) | 176.87 (141.49) |  |
| Rangpur | 61.72 (64.96) | 41.27 (35.37 | 242.08 (129.06) | 235.82 (123.81) | 188.22 (140.55) | 176.87 (188.66) |  |
| Sylhet | 103.60 (132.62) | 58.96 (82.54 | 367.71 (216.97) | 353.73 (235.82) | 246.13 (225.36) | 188.66 (294.78) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Place of residence** |  |  |  |  |  |  |  |
| Urban | 100.39 (138.79) | 58.96 (82.54 | 297.11 (172.38) | 271.19 (176.87) | 243.96 (185.77) | 235.82 (235.82) | 0.491 |
| Rural | 89.12 (109.45) | 58.96 (82.54 | 277.30 (162.15) | 235.82 (176.87) | 218.42 (171.53) | 188.66 (212.24) |  |
| P-value | 0.169 |  | 0.006 |  | <0.001 |  |  |
| **Religion** |  |  |  |  |  |  |  |
| Islam | 95.32 (126.06) | 58.96 (82.54 | 283.33 (167.24) | 235.82 (176.87) | 227.67 (178.20) | 200.45 (212.24) | 0.048 |
| Others | 74.32 (54.61) | 58.96 (70.75 | 300.31 (159.87) | 282.99 (153.28) | 232.18 (171.78) | 235.82 (212.32) |  |
| P-value | 0.093 |  | 0.135 |  | 0.656 |  |  |

**Table S6: Factors Associated with various types of child delivery out-of-pocket cost in Bangladesh (US$) based on the 2022 BDHS Survey**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Institutional Normal Delivery** | | **Cesarean Section** | | **Total** | |
|  | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** | **Coef. (SE)** | **P-value** |
| **Delivery** |  |  |  |  |  |  |
| Home Delivery |  |  |  |  |  |  |
| Institutional Normal Delivery |  |  |  |  | Ref |  |
| Cesarean section |  |  |  |  | 0.60 (0.02) | 0.000 |
| **Women’s age group** |  |  |  |  |  |  |
| 15‐19 | Ref |  | Ref |  | Ref |  |
| 20‐24 | 0.04 (0.05) | 0.191 | 0.00 (0.02) | 0.596 | 0.01 (0.02) | 0.291 |
| 25‐34 | 0.03 (0.06) | 0.258 | 0.04 (0.03) | 0.027 | 0.04 (0.03) | 0.051 |
| 35‐49 | 0.03 (0.07) | 0.384 | 0.02 (0.03) | 0.279 | 0.02 (0.03) | 0.353 |
| **Women's education** |  |  |  |  |  |  |
| No education |  |  |  |  |  |  |
| Primary |  |  |  |  |  |  |
| Secondary |  |  |  |  |  |  |
| Higher |  |  |  |  |  |  |
| **Women’s working status** |  |  |  |  |  |  |
| Not working | Ref |  | Ref |  | Ref |  |
| Working | -0.01 (0.04) | 0.821 | 0.00 (0.02) | 0.879 | -0.00 (0.02) | 0.767 |
| **Women’s BMI** |  |  |  |  |  |  |
| Underweight | Ref |  |  |  |  |  |
| Normal weight | 0.04 (0.07) | 0.515 |  |  |  |  |
| Overweight | 0.00 (0.07) | 0.957 |  |  |  |  |
| Obese | -0.01 (0.06) | 0.898 |  |  |  |  |
| **ANC visit** |  |  |  |  |  |  |
| No ANC |  |  |  |  |  |  |
| 1‐3 |  |  |  |  |  |  |
| ≥4 |  |  |  |  |  |  |
| **Husband age** |  |  |  |  |  |  |
| 15-29 | Ref |  | Ref |  | Ref |  |
| 30-44 | 0.03 (0.04) | 0.322 | 0.02 (0.02) | 0.090 | 0.03 (0.02) | 0.064 |
| 45 or above | -0.04 (0.07) | 0.633 | 0.04 (0.03) | 0.166 | 0.01 (0.03) | 0.482 |
| **Husband education** |  |  |  |  |  |  |
| No education | Ref |  |  |  | Ref |  |
| Primary | 0.01 (0.05) | 0.499 |  |  | -0.03 (0.02) | 0.646 |
| Secondary | 0.01 (0.05) | 0.304 |  |  | -0.02 (0.02) | 0.680 |
| Higher | 0.02 (0.06) | 0.055 |  |  | -0.02 (0.03) | 0.115 |
| **Husband occupation** |  |  |  |  |  |  |
| Not working |  |  |  |  |  |  |
| Farmer |  |  |  |  |  |  |
| Agriculture |  |  |  |  |  |  |
| Day labor |  |  |  |  |  |  |
| Factory worker |  |  |  |  |  |  |
| Service holder |  |  |  |  |  |  |
| Business |  |  |  |  |  |  |
| Skilled worker |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |
| **Household size** |  |  |  |  |  |  |
| ≤4 | Ref |  | Ref |  | Ref |  |
| >4 | 0.03 (0.03) | 0.318 | -0.00 (0.01) | 0.882 | 0.00 (0.01) | 0.736 |
| **Wealth index** |  |  |  |  |  |  |
| Poor | Ref |  | Ref |  | Ref |  |
| Middle | -0.05 (0.04) | 0.498 | 0.02 (0.02) | 0.075 | 0.01 (0.02) | 0.458 |
| Rich | 0.05 (0.05) | 0.063 | 0.02 (0.02) | 0.007 | 0.04 (0.02) | 0.009 |
| **Birth order** |  |  |  |  |  |  |
| 1 | Ref |  | Ref |  | Ref |  |
| 2‐3 | -0.06 (0.04) | 0.011 | -0.01 (0.02) | 0.154 | -0.03 (0.02) | 0.020 |
| ≥4 | -0.03 (0.07) | 0.299 | -0.01 (0.04) | 0.403 | -0.01 (0.04) | 0.324 |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |
| No exposure | Ref |  | Ref |  | Ref |  |
| Exposure | -0.03 (0.03) | 0.316 | 0.01 (0.01) | 0.135 | -0.00 (0.01) | 0.882 |
| **Division** |  |  |  |  |  |  |
| Barisal | Ref |  | Ref |  | Ref |  |
| Chittagong | 0.04 (0.07) | 0.848 | -0.01 (0.03) | 0.717 | 0.01 (0.03) | 0.773 |
| Dhaka | -0.04 (0.07) | 0.426 | -0.05 (0.03) | 0.015 | -0.05 (0.03) | 0.051 |
| Khulna | -0.24 (0.08) | 0.001 | -0.18 (0.03) | 0.000 | -0.19 (0.03) | 0.000 |
| Mymensingh | -0.17 (0.08) | 0.019 | -0.07 (0.03) | 0.031 | -0.10 (0.03) | 0.003 |
| Rajshahi | -0.11 (0.09) | 0.135 | -0.18 (0.03) | 0.000 | -0.16 (0.03) | 0.000 |
| Rangpur | -0.24 (0.08) | 0.001 | -0.13 (0.03) | 0.000 | -0.16 (0.03) | 0.000 |
| Sylhet | -0.01 (0.07) | 0.596 | 0.00 (0.03) | 0.910 | -0.01 (0.04) | 0.699 |
| **Place of residence** |  |  |  |  |  |  |
| Urban | Ref |  | Ref |  | Ref |  |
| Rural | -0.01 (0.04) | 0.786 | 0.02 (0.02) | 0.455 | 0.02 (0.02) | 0.322 |
| **Religion** |  |  |  |  |  |  |
| Islam | Ref |  | Ref |  | Ref |  |
| Others | -0.04 (0.04) | 0.341 | 0.02 (0.02) | 0.367 | 0.00 (0.02) | 0.901 |
| N | 927 |  | 2236 |  | 3159 |  |
| Mean VIF | 3.55 |  | 1.86 |  | 2.00 |  |
| **R2** | 11.41% |  | 7.45% |  | 44.86% |  |
| **Adjusted R2** | 8.26% |  | 6.38% |  | 44.81% |  |
| **AIC** | 898.67 |  | 767.82 |  | 1785.13 |  |
| **BIC** | 1033.96 |  | 893.50 |  | 1943.64 |  |
| **RMSE** | 0.39 |  | 0.29 |  | 0.32 |  |
| **F value, (Prob > F)** | <0.001 |  | <0.001 |  | <0.001 |  |