**Table 1: Background information on the delivered mother from the 2014, 2017–18, and 2022 BDHS surveys.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2014** | **2017-18** | **2022** | **Total** |
| **Delivery** |  |  |  |  |
| Home Delivery | 2812 (61.52) | 2472 (50.02) | - | 5284 (41.46) |
| Institutional Normal Delivery | 659 (14.43) | 829 (16.78) | 976 (30.19) | 2464 (19.34) |
| Cesarean section | 1100 (24.06) | 1641 (33.20) | 2256 (69.81) | 4997 (39.21) |
| **Age, years [mean (SD)]** | 24.59 (5.75) | 24.96 (5.57) | 25.65 (5.58) | 25.00 (5.65) |
| **Women’s age group** |  |  |  |  |
| 15‐19 | 957 (20.93) | 883 (17.87) | 464 (14.37) | 2304 (18.08) |
| 20‐24 | 1529 (33.46) | 1735 (35.11) | 1097 (33.96) | 4362 (34.22) |
| 25‐34 | 1181 (25.84) | 1278 (25.85) | 888 (27.48) | 2247 (26.26) |
| 35‐49 | 904 (19.77) | 1046 (21.16) | 782 (24.19) | 2731 (21.43) |
| **Women's education** |  |  |  |  |
| No education | 647 (14.15) | 307 (6.20) | 117 (3.63) | 1071 (8.40) |
| Primary | 1277 (27.94) | 1379 (27.91) | 530 (16.41) | 3187 (25.00) |
| Secondary | 2187 (47.84) | 2416 (48.88) | 1811 (56.03) | 6413 (50.32) |
| Higher | 460 (10.07) | 840 (17.01) | 773 (23.93) | 2074 (16.27) |
| **Women’s working status** |  |  |  |  |
| Not working | 3481 (76.19) | 3086 (62.44) | 2578 (79.77) | 9145 (71.76) |
| Working | 1088 (23.81) | 1856 (37.56) | 654 (20.23) | 3598 (28.24) |
| **Women’s BMI** |  |  |  |  |
| Underweight | 1087 (23.71) | 744 (15.06) | 207 (6.40) | 2035 (15.96) |
| Normal weight | 2035 (46.82) | 2242 (45.37) | 622 (19.26) | 5005 (39.27) |
| Overweight | 977 (22.47) | 1367 (27.66) | 541 (16.73) | 2935 (23.03) |
| Obese | 338 (7.01) | 589 (11.91) | 1862 (57.61) | 2771 (21.74) |
| **ANC visit** |  |  |  |  |
| No ANC | 978 (21.42) | 390 (7.90) | 84 (2.60) | 1452 (11.40) |
| 1‐3 | 2160 (47.32) | 2221 (44.95) | 1545 (47.80) | 5926 (46.52) |
| ≥4 | 1428 (31.27) | 2330 (47.15) | 1603 (49.60) | 5361 (42.08) |
| **Husband age** |  |  |  |  |
| 15-29 | 1486 (32.95) | 1563 (32.08) | 1002 (31.27) | 4051 (32.18) |
| 30-44 | 2651 (58.79) | 2937 (60.26) | 1957 (61.05) | 7545 (59.93) |
| 45 or above | 373 (8.27) | 373 (7.66) | 246 (7.68) | 992 (7.88) |
| **Husband education** |  |  |  |  |
| No education | 1091 (23.87) | 661 (13.59) | 348 (10.89) | 2100 (16.63) |
| Primary | 1372 (30.02) | 1651 (33.93) | 770 (24.07) | 3793 (30.02) |
| Secondary | 1458 (31.90) | 1648 (33.87) | 1241 (38.80) | 4347 (34.41) |
| Higher | 649 (14.20) | 906 (18.61) | 839 (26.24) | 2394 (18.95) |
| **Husband occupation** |  |  |  |  |
| Not working | - | 32 (0.65) | 64 (2.01) | 96 (0.76) |
| Farmer | 617 (13.55) | 504 (10.35) | 233 (7.28) | 1353 (10.73) |
| Agriculture | 538 (11.83) | 432 (8.88) | 228 (7.13) | 1199 (9.50) |
| Day labor | 469 (10.30) | 542 (11.15) | 282 (8.81) | 1293 (10.25) |
| Factory worker | 405 (8.89) | 664 (13.64) | 769 (24.02) | 1837 (14.56) |
| Service holder | 271 (5.95) | 286 (5.87) | 291 (9.08) | 847 (6.71) |
| Business | 995 (21.86) | 1017 (20.91) | 680 (21.24) | 2692 (21.34) |
| Skilled worker | 1099 (24.15) | 1366 (28.09) | 623 (19.45) | 3088 (24.48) |
| Other | 158 (3.48) | 22 (0.45) | 31 (0.90) | 211 (1.68) |
| **Household size** |  |  |  |  |
| ≤4 | 1453 (31.78) | 1543 (31.22) | 1105 (34.19) | 4101 (32.17) |
| >4 | 3119 (68.22) | 3399 (68.78) | 2127 (65.81) | 8644 (67.83) |
| **Wealth index** |  |  |  |  |
| Poor | 1857 (40.62) | 2050 (41.48) | 1001 (30.98) | 4908 (38.51) |
| Middle | 877 (19.19) | 945 (19.12) | 678 (20.98) | 2500 (19.62) |
| Rich | 1837 (40.19) | 1947 (39.40) | 1553 (48.04) | 5337 (41.88) |
| **Birth order** |  |  |  |  |
| 1 | 1810 (39.59) | 1883 (38.11) | 1367 (42.53) | 5060 (39.76) |
| 2‐3 | 2126 (46.50) | 2449 (49.55) | 1655 (51.50) | 6230 (48.95) |
| ≥4 | 636 (13.92) | 610 (12.34) | 192 (5.97) | 1438 (11.30) |
| **Mass media** |  |  |  |  |
| No Exposure | 1842 (40.29) | 1751 (35.42) | 790 (24.44) | 4382 (34.38) |
| Exposure | 2730 (59.71) | 3191 (64.58) | 2442 (75.56) | 8363 (65.62) |
| **Division** |  |  |  |  |
| Barisal | 262 (5.74) | 282 (5.70) | 168 (5.19) | 712 (5.58) |
| Chittagong | 1002 (21.93) | 1038 (21.01) | 652 (20.17) | 2693 (21.13) |
| Dhaka | 1614 (35.31) | 1256 (25.41) | 852 (26.37) | 3722 (29.20) |
| Khulna | 364 (7.97) | 458 (9.27) | 432 (13.37) | 1255 (9.84) |
| Mymensingh | - | 426 (8.63) | 236 (7.30) | 662 (5.19) |
| Rajshahi | 458 (10.03) | 578 (11.70) | 378 (11.71) | 1415 (11.10) |
| Rangpur | 448 (9.79) | 531 (10.76) | 344 (10.65) | 1323 (10.38) |
| Sylhet | 422 (9.22) | 372 (7.53) | 170 (5.25) | 963 (7.56) |
| **Place of residence** |  |  |  |  |
| Urban | 1185 (25.91) | 1318 (26.67) | 995 (30.78) | 3497 (27.44) |
| Rural | 3387 (74.09) | 3623 (73.33) | 2237 (69.22) | 9247 (72.56) |
| **Religion** |  |  |  |  |
| Islam | 4193 (91.71) | 4539 (91.86) | 2924 (90.48) | 11656 (91.46) |
| Others | 379 (8.29) | 402 (8.14) | 308 (9.52) | 1089 (8.54) |
| Total | 4571 (100.00) | 4942 (100.00) | 3232 (100.00) | 12745 (1000.00) |

**Table 2: Distribution of out-of-pocket costs for various types of child delivery in Bangladesh (US$) from the BDHS surveys conducted in 2014, 2017–18, and 2022.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **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)** |  |
| **2014** | 15.44 (25.11) | 6.26 (17.52) | 59.91 (73.19) | 37.53 (56.30) | 258.45 (261.05) | 225.20 (187.66) | 80.94 (166.87) | 18.77 (81.32) | <0.001 |
| **2017-18** | 16.67 (30.96) | 9.01 (17.12 | 69.69 (76.89) | 51.50 (51.50) | 272.27 (201.26) | 257.50 (167.37) | 110.89 (168.38) | 33.47 (172.52) | <0.001 |
| **2022** | **-** | **-** | 93.03 (120.50) | 58.96 (82.54) | 285.14 (166.51) | 235.82 (176.87) | 228.16 (177.50) | 212.24 (212.24) | <0.001 |
| **Total** | 16.02 (28.06) | 7.72 (16.81) | 75.88 (96.14) | 51.50 (62.55) | 275.15 (201.80) | 235.82 (186.36) | 130.32 (180.11) | 58.45 (199.73) | <0.001 |
| **P-value** | <0.001 | | <0.001 | | <0.001 | | <0.001 | |  |

**Table 3: Distribution of out-of-pocket costs for various types of child delivery in Bangladesh (US$) based on pooled data from the BDHS surveys (2014–2022).**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Home Delivery | | Normal Delivery | | Cesarean Section | | Total | | P-value |
|  | Mean (SD) | Median (IQR) | Mean (SD) | Median (IQR) | Mean (SD) | Median (IQR) | Mean (SD) | Median (IQR) |  |
| **Age** | 24.84 (5.75) | 24.00 (20.00 | 24.58 (5.56) | 24.00 (20.00) | 25.39 (5.56) | 25.00 (21.00) | 25.00 (5.65) | 24.00 (21.00) | <0.001 |
| **Women’s age group** |  |  |  |  |  |  |  |  |  |
| 15‐19 | 17.25 (24.06) | 10.01 (21.89) | 70.42 (82.72) | 50.04 (57.52) | 234.00 (124.72) | 231.75 (144.65) | 100.97 (127.12) | 38.62 (155.79) | <0.001 |
| 20‐24 | 16.10 (30.29) | 8.56 (16.74) | 79.30 (101.10) | 58.96 (64.37) | 260.26 (157.19) | 235.82 (160.21) | 125.38 (156.83) | 58.96 (196.06) |  |
| 25‐34 | 15.32 (24.69) | 7.51 (17.38) | 75.36 (102.02) | 49.48 (62.55) | 297.90 (271.95) | 250.22 (176.87) | 143.51 (223.51) | 58.96 (223.31) |  |
| 35‐49 | 15.63 (31.39) | 6.44 (17.48) | 75.71 (90.95) | 51.50 (66.54) | 296.14 (196.07) | 257.50 (183.63) | 145.87 (188.40) | 62.55 (226.81) |  |
| P-value | 0.3984 |  | 0.4410 |  | <0.001 |  | <0.001 |  |  |
| **Women's education** |  |  |  |  |  |  |  |  |  |
| No education | 11.47 (20.19) | 6.26 (11.51) | 56.23 (57.99) | 35.37 (55.75) | 223.27 (144.92) | 200.18 (122.31) | 49.39 (97.12) | 11.10 (35.60) | <0.001 |
| Primary | 13.34 (21.46) | 6.44 (14.16) | 68.24 (85.56) | 47.16 (53.67) | 257.66 (159.04) | 235.82 (167.37) | 79.98 (131.80) | 19.31 (93.83) |  |
| Secondary | 18.73 (34.29) | 12.51 (21.16) | 74.10 (98.24) | 51.50 (57.52) | 265.30 (200.40) | 235.82 (164.16) | 133.73 (179.23) | 64.37 (211.16) |  |
| Higher | 22.84 (23.85) | 15.45 (22.85 | 98.75 (109.04 | 62.55 (82.54 | 305.70 (222.80 | 257.50 (195.37) | 228.47 (220.91) | 193.12 (257.50) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |  |  |
| Not working | 16.86 (30.69) | 8.76 (22.52) | 78.92 (93.45) | 58.96 (68.58) | 280.88 (210.56) | 250.22 (176.87) | 141.88 (189.23) | 64.37 (222.95) | <0.001 |
| Working | 14.41 (22.01) | 7.08 (16.26) | 66.95 (103.29) | 38.62 (47.16) | 254.95 (165.77) | 235.82 (168.59) | 100.04 (149.46) | 25.75 (148.06) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Women’s BMI** |  |  |  |  |  |  |  |  |  |
| Underweight | 13.50 (20.68) | 6.44 (14.16) | 67.03 (79.97) | 38.62 (52.23) | 232.58 (131.03) | 199.56 (184.02) | 69.25 (112.26) | 18.77 (70.99) | <0.001 |
| Normal weight | 16.12 (25.71) | 7.72 (16.94) | 72.94 (93.71) | 50.04 (62.55) | 255.80 (201.14) | 235.82 (168.59) | 95.14 (155.81) | 25.75 (135.06) |  |
| Overweight | 18.04 (35.86) | 10.01 (22.45) | 73.10 (88.76) | 50.04 (52.79) | 280.62 (184.54) | 250.22 (178.58) | 149.20 (180.66) | 75.07 (230.46) |  |
| Obese | 19.57 (42.19) | 12.51 (21.16) | 86.62 (110.89) | 58.96 (59.57) | 296.16 (224.17) | 253.86 (176.87) | 217.76 (219.79) | 188.66 (235.82) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **ANC visit** |  |  |  |  |  |  |  |  |  |
| No ANC | 11.27 (22.15) | 6.26 (11.76) | 65.38 (71.89) | 37.53 (70.36) | 248.46 (129.44) | 237.71 (162.64) | 31.98 (74.70) | 6.44 (22.33) | <0.001 |
| 1‐3 | 16.82 (31.64) | 8.76 (18.02) | 70.50 (86.82) | 50.04 (57.52) | 252.78 (148.04) | 235.82 (158.27) | 108.53 (143.75 | 37.53 (166.57) |  |
| ≥4 | 18.77 (24.91) | 12.51 (21.27) | 82.68 (106.77) | 55.39 (68.58) | 290.68 (231.02) | 250.22 (176.87) | 178.83 (215.40) | 128.75 (231.75) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband age** |  |  |  |  |  |  |  |  |  |
| 15-29 | 16.63 (31.96) | 9.01 (17.77) | 71.30 (82.61) | 51.50 (56.79) | 245.13 (151.57) | 235.82 (162.64) | 108.51 (143.02 | 38.62 (165.07) | <0.001 |
| 30-44 | 16.19 (26.91) | 7.51 (17.38) | 80.54 (106.62) | 53.06 (69.31) | 285.96 (218.57) | 250.22 (176.87) | 143.38 (196.01) | 64.37 (223.31) |  |
| 45 or above | 13.21 (19.42) | 6.26 (15.45) | 65.59 (68.88) | 42.49 (51.48) | 301.77 (212.43) | 257.50 (197.06) | 125.78 (186.06) | 37.53 (186.69) |  |
| P-value | 0.068 |  | 0.025 |  | <0.001 |  | <0.001 |  |  |
| **Husband education** |  |  |  |  |  |  |  |  |  |
| No education | 12.49 (22.64 | 6.26 (11.62) | 58.11 (64.20) | 37.53 (41.27) | 260.87 (186.17) | 235.82 (184.62) | 68.81 (130.77) | 12.87 (59.98) | <0.001 |
| Primary | 15.48 (27.86) | 7.72 (16.81) | 67.87 (90.74) | 47.16 (58.96) | 247.07 (152.66) | 235.82 (162.64) | 91.22 (136.10) | 25.75 (122.31) |  |
| Secondary | 18.59 (33.15) | 12.51 (21.27) | 78.01 (91.80) | 55.36 (68.58) | 266.94 (177.47) | 235.82 (161.49) | 139.20 (169.67) | 70.75 (220.81) |  |
| Higher | 20.74 (23.73) | 12.87 (19.49 | 98.56 (125.41 | 62.55 (82.54 | 306.39 (249.98 | 257.50 (197.06) | 223.80 (241.05) | 188.66 (262.92) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Husband occupation** |  |  |  |  |  |  |  |  |  |
| Not working | 15.98 (24.45) | 6.44 (12.36 | 97.49 (85.82 | 70.75 (93.38 | 320.64 (220.42 | 259.40 (235.13) | 218.96 (212.54) | 165.07 (230.40) | <0.001 |
| Farmer | 13.49 (24.87) | 6.44 (13.73 | 64.60 (82.28 | 45.06 (53.67 | 226.29 (141.66 | 193.12 (141.49) | 83.41 (125.80) | 24.30 (118.85) |  |
| Agriculture | 13.12 (20.42) | 6.26 (17.48 | 76.94 (109.35 | 47.16 (51.14 | 229.52 (126.37 | 196.79 (153.15) | 70.78 (115.17) | 18.77 (72.25) |  |
| Day labor | 13.07 (20.74) | 6.44 (12.87 | 68.33 (102.52 | 38.62 (53.67 | 246.34 (153.11 | 235.82 (130.38) | 81.09 (131.75) | 20.60 (111.66) |  |
| Factory worker | 18.62 (45.11) | 8.76 (16.52 | 86.03 (110.47 | 58.96 (71.72 | 284.08 (164.77 | 257.50 (166.07) | 160.19 (175.54) | 117.91 (238.73) |  |
| Service holder | 23.35 (23.59) | 16.74 (25.93 | 101.38 (123.69 | 64.37 (80.38 | 316.23 (195.98 | 283.25 (198.59) | 241.60 (207.48) | 212.24 (282.99) |  |
| Business | 17.05 (26.88) | 9.01 (18.02 | 74.07 (89.40 | 51.50 (65.10 | 289.17 (248.07 | 250.22 (176.87) | 151.83 (213.76) | 77.25 (222.95) |  |
| Skilled worker | 18.02 (28.38) | 12.51 (21.21 | 70.57 (81.88 | 47.16 (51.50 | 261.68 (209.84 | 235.82 (167.37) | 120.46 (174.89) | 47.40 (176.15) |  |
| Other | 17.49 (35.90) | 6.44 (23.77 | 86.70 (96.32 | 58.96 (75.07 | 251.97 (102.60 | 250.22 (135.91) | 100.59 (126.04) | 34.41 (181.23) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Household size** |  |  |  |  |  |  |  |  |  |
| ≤4 | 16.14 (31.89) | 7.51 (17.44 | 70.56 (84.50 | 47.16 (57.52 | 268.23 (200.74 | 235.82 (175.65) | 133.66 (180.37) | 62.55 (219.24) | 0.179 |
| >4 | 15.98 (26.33) | 7.72 (16.81 | 78.30 (100.93 | 51.50 (65.10 | 278.63 (202.27 | 250.22 (178.58) | 128.80 (179.98) | 51.50 (194.21) |  |
| P-value | 0.8522 |  | 0.0623 |  | 0.0867 |  | 0.1614 |  |  |
| **Wealth index** |  |  |  |  |  |  |  |  |  |
| Poor | 13.69 (27.94) | 6.44 (14.16) | 65.94 (75.00) | 45.06 (53.67) | 245.94 (159.07) | 231.75 (140.28) | 76.92 (127.83) | 19.31 (93.83) | <0.001 |
| Middle | 17.06 (23.28) | 10.01 (22.45) | 71.17 (81.77) | 50.04 (62.55) | 251.62 (148.48) | 235.82 (171.74) | 116.13 (145.70) | 50.04 (175.15) |  |
| Rich | 20.41 (30.99) | 12.51 (20.60) | 85.60 (113.99) | 58.96 (68.58) | 293.27 (226.65) | 257.50 (176.87) | 184.59 (215.15) | 128.75 (245.14) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Birth order** |  |  |  |  |  |  |  |  |  |
| 1 | 19.26 (32.91) | 12.51 (20.02) | 80.22 (93.51) | 58.96 (64.85) | 267.45 (200.20) | 235.82 (172.72) | 146.19 (183.03) | 82.54 (216.51) | <0.001 |
| 2‐3 | 14.82 (23.92) | 6.44 (17.48) | 72.17 (100.88) | 47.16 (58.96) | 282.24 (207.06) | 250.22 (176.87) | 131.60 (185.71) | 50.04 (209.86) |  |
| ≥4 | 13.68 (28.90) | 6.44 (13.73) | 71.91 (84.85v | 39.91 (53.67) | 277.19 (157.69) | 250.22 (186.36) | 68.11 (123.71) | 12.87 (58.69) |  |
| P-value | <0.001 |  | 0.1153 |  | 0.0417 |  | <0.001 |  |  |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |  |
| No exposure | 14.35 (28.56) | 6.44 (16.23) | 76.22 (103.08) | 51.50 (62.55) | 258.69 (160.77) | 235.82 (180.25) | 81.91 (135.30) | 20.60 (93.83) | <0.001 |
| Exposure | 17.77 (27.42) | 10.30 (21.27) | 75.72 (92.90) | 51.50 (62.55) | 279.40 (210.91) | 248.05 (178.58) | 156.32 (195.18) | 94.33 (231.45) |  |
| P-value | <0.001 |  | 0.9048 |  | <0.001 |  | <0.001 |  |  |
| **Division** |  |  |  |  |  |  |  |  |  |
| Barisal | 18.05 (25.17 | 9.01 (21.27) | 90.59 (94.69) | 58.96 (92.16) | 318.16 (251.82) | 294.78 (182.20) | 136.22 (207.69) | 38.62 (226.81) | <0.001 |
| Chittagong | 22.45 (26.77) | 12.87 (19.49) | 95.25 (91.01v | 64.37 (79.29) | 321.11 (168.68) | 294.78 (161.05) | 134.51 (168.13) | 58.96 (222.95) |  |
| Dhaka | 15.75 (45.04) | 6.44 (18.06) | 88.69 (141.92) | 58.96 (66.93) | 300.56 (243.62) | 250.22 (166.07) | 164.67 (224.24) | 90.12 (237.71) |  |
| Khulna | 14.88 (20.10) | 10.01 (13.76) | 55.60 (89.92) | 37.53 (38.97) | 218.99 (137.48) | 187.66 (128.75) | 130.05 (143.29) | 90.12 (174.36) |  |
| Mymensingh | 12.27 (15.96) | 7.72 (12.87) | 61.52 (71.52) | 38.62 (42.49) | 274.18 (173.74) | 257.50 (176.87) | 138.69 (172.65) | 58.96 (224.03) |  |
| Rajshahi | 13.65 (24.92) | 6.44 (13.73) | 52.37 (53.08) | 37.53 (40.79) | 207.97 (113.42) | 187.66 (128.75) | 107.26 (121.52) | 62.55 (166.86) |  |
| Rangpur | 12.86 (23.32) | 6.44 (14.20) | 53.75 (61.34) | 35.37 (45.61) | 222.76 (122.17) | 200.18 (141.76) | 99.15 (125.12) | 35.37 (169.14) |  |
| Sylhet | 12.86 (23.32) | 6.44 (14.20) | 53.75 (61.34) | 35.37 (45.61) | 222.76 (122.17) | 200.18 (141.76) | 99.15 (125.12) | 35.37 (169.14) |  |
| P-value | <0.001 |  | <0.001 |  | <0.001 |  | <0.001 |  |  |
| **Place of residence** |  |  |  |  |  |  |  |  |  |
| Urban | 17.28 (24.86) | 9.01 (21.89) | 72.82 (101.25) | 47.16 (53.52) | 287.93 (235.74) | 250.22 (186.36) | 164.37 (213.72) | 100.09 (230.91) | <0.001 |
| Rural | 15.63 (28.98) | 7.51 (17.44) | 77.76 (92.83) | 53.06 (68.41) | 265.32 (170.56) | 235.82 (167.37) | 112.40 (156.66) | 37.53 (179.94) |  |
| P-value | .0737 |  | 0.2126 |  | <0.001 |  | <0.001 |  |  |
| **Religion** |  |  |  |  |  |  |  |  |  |
| Islam | 16.15 (28.45) | 7.72 (16.81 | 75.78 (96.74) | 51.50 (62.55) | 275.40 (198.10) | 235.82 (188.66 | 128.88 (177.96) | 51.50 (194.21) | 0.950 |
| Others | 14.25 (21.88) | 6.44 (13.73) | 76.69 (91.17) | 57.94 (64.37) | 272.93 (232.45) | 235.82 (145.01) | 145.08 (200.30) | 87.58 (222.95) |  |
| P-value | 0.2216 |  | 0.8836 |  | 0.7947 |  | <0.001 |  |  |

**Table 4: Factors Associated with various types of child delivery out-of-pocket cost in Bangladesh (US$) based on pooled data from the BDHS surveys (2014–2022).**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Home Delivery** | **P-value** | **Institutional Normal Delivery** | **P-value** | **Cesarean Section** | **P-value** | **Total** | **P-value** |
|  | **Coef. (SE)** |  | **Coef. (SE)** |  | **Coef. (SE)** |  | **Coef. (SE)** |  |
| **Delivery** |  |  |  |  |  |  |  |  |
| Home Delivery |  |  |  |  |  |  | Ref |  |
| Institutional Normal Delivery |  |  |  |  |  |  | 0.68 (0.02) | <0.001 |
| Cesarean section |  |  |  |  |  |  | 1.31 (0.01) | <0.001 |
| **Women’s age group** |  |  |  |  |  |  |  |  |
| 15‐19 | Ref |  | Ref |  | Ref |  | Ref |  |
| 20‐24 | 0.01 (0.03) | 0.789 | 0.04 (0.03) | 0.040 | 0.01 (0.01) | 0.974 | 0.01 (0.01) | 0.576 |
| 25‐34 | 0.05 (0.04) | 0.244 | 0.01 (0.04) | 0.486 | 0.02 (0.02) | 0.247 | 0.02 (0.02) | 0.163 |
| 35‐49 | 0.12 (0.04) | 0.011 | 0.03 (0.04) | 0.269 | 0.03 (0.02) | 0.241 | 0.06 (0.02) | 0.003 |
| **Women's education** |  |  |  |  |  |  |  |  |
| No education | Ref |  |  |  |  |  |  |  |
| Primary | -0.03 (0.03) | 0.356 |  |  |  |  |  |  |
| Secondary | 0.05 (0.04) | 0.230 |  |  |  |  |  |  |
| Higher | 0.10 (0.05) | 0.055 |  |  |  |  |  |  |
| **Women’s working status** |  |  |  |  |  |  |  |  |
| Not working | Ref |  | Ref |  | Ref |  | Ref |  |
| Working | -0.06 (0.02) | 0.002 | -0.03 (0.02) | 0.310 | -0.01 (0.01) | 0.883 | -0.04 (0.01) | 0.001 |
| **Women’s BMI** |  |  |  |  |  |  |  |  |
| Underweight | Ref |  | Ref |  | Ref |  | Ref |  |
| Normal weight | 0.01 (0.02) | 0.545 | 0.05 (0.04) | 0.170 | 0.01 (0.02) | 0.712 | 0.02 (0.02) | 0.200 |
| Overweight | 0.03 (0.03) | 0.294 | 0.04 (0.04) | 0.222 | 0.04 (0.02) | 0.010 | 0.04 (0.02) | 0.021 |
| Obese | 0.06 (0.04) | 0.137 | 0.09 (0.04) | 0.011 | 0.07 (0.02) | <0.001 | 0.07 (0.02) | 0.000 |
| **ANC visit** |  |  |  |  |  |  |  |  |
| No ANC | Ref |  |  |  |  |  | Ref |  |
| 1‐3 | 0.12 (0.02) | 0.000 |  |  |  |  | 0.11 (0.02) | 0.000 |
| ≥4 | 0.18 (0.03) | 0.000 |  |  |  |  | 0.14 (0.02) | 0.000 |
| **Husband age** |  |  |  |  |  |  |  |  |
| 15-29 | Ref |  | Ref |  | Ref |  | Ref |  |
| 30-44 | 0.03 (0.03) | 0.257 | 0.02 (0.02) | 0.413 | 0.03 (0.01) | 0.099 | 0.02 (0.01) | 0.142 |
| 45 or above | -0.02 (0.04) | 0.515 | -0.02 (0.05) | 0.703 | 0.03 (0.02) | 0.092 | 0.00 (0.02) | 0.895 |
| **Husband education** |  |  |  |  |  |  |  |  |
| No education | Ref |  | Ref |  | Ref |  | Ref |  |
| Primary | 0.01 (0.03) | 0.610 | 0.05 (0.04) | 0.187 | -0.02 (0.02) | 0.753 | 0.02 (0.02 ) | 0.118 |
| Secondary | 0.01 (0.03) | 0.524 | 0.08 (0.04) | 0.010 | -0.00 (0.02) | 0.988 | 0.02 (0.02) | 0.008 |
| Higher | 0.06 (0.05) | 0.107 | 0.12 (0.04) | 0.000 | 0.02 (0.02) | 0.038 | 0.04 (0.02) | 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 | 0.02 (0.02) | 0.412 | 0.01 (0.02) | 0.562 | 0.00 (0.01) | 0.677 | 0.01 (0.01) | 0.320 |
| **Wealth index** |  |  |  |  |  |  |  |  |
| Poor | Ref |  | Ref |  | Ref |  | Ref |  |
| Middle | 0.04 (0.03) | 0.116 | 0.01 (0.03) | 0.646 | -0.02 (0.01) | 0.874 | 0.03 (0.01) | 0.012 |
| Rich | 0.09 (0.03) | 0.004 | 0.03 (0.03) | 0.087 | 0.01 (0.01) | 0.033 | 0.05 (0.01) | 0.000 |
| **Birth order** |  |  |  |  |  |  |  |  |
| 1 | Ref |  | Ref |  | Ref |  | Ref |  |
| 2‐3 | -0.15 (0.03) | 0.000 | -0.08 (0.02) | 0.000 | -0.00 (0.01) | 0.575 | -0.07 (0.01) | 0.000 |
| ≥4 | -0.16 (0.04) | 0.000 | -0.08 (0.04) | 0.015 | -0.02 (0.02) | 0.252 | -0.09 (0.02) | 0.000 |
| **Mass media exposure (TV/radio)** |  |  |  |  |  |  |  |  |
| No exposure | Ref |  | Ref |  | Ref |  | Ref |  |
| Exposure | 0.01 (0.02) | 0.486 | -0.04 (0.02) | 0.153 | 0.01 (0.01) | 0.550 | 0.00 (0.01) | 0.710 |
| **Division** |  |  |  |  |  |  |  |  |
| Barisal | Ref |  | Ref |  | Ref |  | Ref |  |
| Chittagong | 0.10 (0.04) | 0.006 | 0.06 (0.04 | 0.168 | 0.03 (0.02) | 0.811 | 0.06 (0.02) | 0.003 |
| Dhaka | -0.09 (0.04) | 0.027 | -0.00 (0.05 | 0.877 | -0.04 (0.02) | 0.001 | -0.06 (0.02) | 0.002 |
| Khulna | -0.06 (0.04) | 0.097 | -0.17 (0.04 | 0.000 | -0.16 (0.02) | 0.001 | -0.15 (0.02) | 0.000 |
| Mymensingh | -0.16 (0.05) | 0.001 | -0.14 (0.05 | 0.006 | -0.05 (0.02) | 0.001 | -0.11 (0.03) | 0.000 |
| Rajshahi | -0.18 (0.05) | 0.000 | -0.18 (0.05 | 0.001 | -0.17 (0.02) | 0.000 | -0.19 (0.02) | 0.000 |
| Rangpur | -0.16 (0.05) | 0.000 | -0.21 (0.05 | 0.000 | -0.14 (0.02) | 0.000 | -0.17 (0.02) | 0.000 |
| Sylhet | -0.12 (0.04) | 0.004 | 0.03 (0.05 | 0.640 | 0.05 (0.02) | 0.393 | -0.05 (0.02) | 0.020 |
| **Place of residence** |  |  |  |  |  |  |  |  |
| Urban | Ref |  | Ref |  | Ref |  | Ref |  |
| Rural | -0.00 (0.03) | 0.734 | 0.09 (0.02 | 0.000 | 0.02 (0.01) | 0.156 | 0.03 (0.01) | 0.018 |
| **Religion** |  |  |  |  |  |  |  |  |
| Islam | Ref |  | Ref |  | Ref |  | Ref |  |
| Others | 0.02 (0.04) | 0.673 | 0.01 (0.03) | 0.741 | -0.00 (0.01) | 0.955 | 0.01 (0.02) | 0.671 |

**Table 5: Model evaluation of various types of child delivery out-of-pocket cost in Bangladesh (US$) based on pooled data from the BDHS surveys (2014–2022).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Home Delivery** | **Institutional Normal Delivery** | **Cesarean Section** | **Total** |
| N | 4,496 | 2417 | 4,891 | 11,802 |
| Mean VIF | 1.90 | 2.03 | 2.23 | 2.05 |
| **R2** | 9.35% | 12.51% | 9.35% | 68.99% |
| **Adjusted R2** | 8.27% | 11.97% | 9.49% | 68.51% |
| **AIC** | 7657.19 | 2391.61 | 1639.05 | 13982.30 |
| **BIC** | 7868.755 | 2553.75 | 1820.92 | 14218.34 |
| **RMSE** | 0.56 | 0.39 | 0.28 | 0.44 |
| **F value, (Prob > F)** | <0.001 | <0.001 | <0.001 | <0.001 |