**Prevalence and factors associated with****undernutrition and overnutrition among ever-married adolescent girls in Bangladesh: an analysis of national surveys from 2004 to 2017**

**Supporting Table 1. Odds ratios of crude and adjusted multinomial logistic regression models for factors associated with underweight among the ever-married adolescent girls in Bangladesh from 2004 to 2017**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Unadjusted OR (95% CI)** | **p-value** | **Adjusted OR (95% CI)** | **p-value** |
| Age of the respondent |  |  |  |
| Age | 0.96 (0.91, 1) | 0.065 | 0.94 (0.90, 0.99) | 0.023 |
| Area of residence (Ref: Rural) |  |  |  |
| Urban | 0.88 (0.76, 1.01) | 0.084 | 0.995 (0.87, 1.14) | 0.946 |
| Education (Ref. No Education) |  |  |  |  |
| Primary | 0.75 (0.6, 0.94) | 0.016 | 0.87 (0.7, 1.07) | 0.189 |
| Secondary | 0.6 (0.49, 0.74) | <0.001 | 0.79 (0.64, 0.98) | 0.032 |
| Higher | 0.38 (0.28, 0.51) | <0.001 | 0.6 (0.43, 0.83) | 0.002 |
| Paid Work (Ref: No paid Work) |  |  |  |
| Yes | 1.1 (0.94, 1.28) | 0.232 | 1.13 (0.97, 1.31) | 0.111 |
| Wealth Index (Ref: Poorest) |  |  |  |
| Poorer | 0.8 (0.66, 0.97) | 0.025 | 0.95 (0.8, 1.12) | 0.521 |
| Middle | 0.71 (0.58, 0.88) | 0.002 | 0.93 (0.78, 1.1) | 0.385 |
| Richer | 0.64 (0.52, 0.78) | <0.001 | 0.98 (0.8, 1.18) | 0.807 |
| Richest | 0.49 (0.39, 0.61) | <0.001 | 0.78 (0.62, 0.98) | 0.035 |
| Number of family members in the household (Ref:1-4 Members) |  |  |  |
| 5-8 members | 0.91 (0.8, 1.03) | 0.172 | 0.96 (0.85, 1.08) | 0.527 |
| 9 or more members | 0.87 (0.72, 1.04) | 0.143 | 0.86 (0.72, 1.01) | 0.067 |
| Partner's Education level (Ref: No education) |  |  |  |
| Primary | 0.88 (0.75, 1.05) | 0.169 | 0.98 (0.84, 1.14) | 0.806 |
| Secondary | 0.65 (0.55, 0.77) | <0.001 | 0.86 (0.72, 1.01) | 0.07 |
| Higher secondary and above  | 0.58 (0.46, 0.72) | <0.001 | 1.02 (0.8, 1.3) | 0.87 |
| Partner's Occupation (Ref: Service holder and businessman) |
| Agriculture based profession  | 1.35 (1.02, 1.79) | 0.032 | 1.03 (0.79, 1.35) | 0.836 |
| Skilled and unskilled worker | 1.13 (0.87, 1.48) | 0.344 | 0.99 (0.77, 1.26) | 0.907 |
| Small business | 1.09 (0.81, 1.46) | 0.568 | 0.95 (0.72, 1.25) | 0.719 |
| Others | 0.95 (0.64, 1.42) | 0.827 | 0.84 (0.57, 1.22) | 0.357 |
| Frequency of media Exposure |
| Newspaper reading |  |  |  |  |
| Reading Newspaper (Ref: Do not read) |  |  |  |  |
| Read newspaper | 0.82 (0.69, 0.96) | 0.016 | 1.02 (0.87, 1.19) | 0.813 |
| Listening Radio (Ref: Do not listen) |  |  |  |
| Listen Radio | 1.08 (0.95, 1.24) | 0.205 | 0.97 (0.84, 1.13) | 0.72 |
| Watching Television (Ref: do not watch) |  |  |  |
| Watch Television | 0.81 (0.72, 0.91) | 0.001 | 0.92 (0.82, 1.04) | 0.195 |
| Current contraceptive using status (Ref: not using) |
| Using contraceptive Method | 1.04 (0.91, 1.18) | 0.523 | 1.04 (0.93, 1.17) | 0.504 |
| Age of first childbirth (Ref: 12-15 years old) |  |  |  |  |
| 16 to 19 years old | 0.94 (0.81, 1.09) | 0.426 | 1.13 (0.97, 1.32) | 0.127 |
| Child ever born of the participants (parity) (Ref: No child) |
| At least one | 1.27 (1.13, 1.43) | <0.001 | 1.14 (0.98, 1.33) | 0.089 |
| More than one | 1.67 (1.37, 2.04) | <0.001 | 1.41 (1.15, 1.73) | 0.001 |
| Year of Survey (ref: 2004) |  |  |  |  |
| 2007 | 0.81 (0.67, 0.99) | 0.042 | 0.84 (0.71, 1.01) | 0.062 |
| 2011 | 0.92 (0.77, 1.1) | 0.392 | 0.95 (0.8, 1.13) | 0.573 |
| 2014 | 0.8 (0.67, 0.97) | 0.022 | 0.89 (0.74, 1.07) | 0.221 |
| 2017 | 0.6 (0.5, 0.72) | <0.001 | 0.63 (0.52, 0.76) | <0.001 |

**Supporting Table 2. Odds ratios of crude and adjusted multinomial logistic regression models for factors associated with overweight/obesity among the ever-married adolescent girls in Bangladesh from 2004 to 2017**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variables** | **Unadjusted OR (95% CI)** | **p-value** | **Adjusted OR (95% CI)** | **p-value** |
| Age of the respondent |  |  |  |
| Age | 1.3 (1.22, 1.4) | <0.001 | 1.22 (1.14, 1.32) | <0.001 |
| Area of residence (Ref: Rural) |
| Urban | 1.62 (1.36, 1.94) | <0.001 | 1.11 (0.92, 1.33) | 0.281 |
| Education (Ref. No Education) |  |  |  |  |
| primary | 1.27 (0.82, 1.96) | 0.275 | 0.95 (0.63, 1.43) | 0.809 |
| secondary | 1.67 (1.11, 2.52) | 0.012 | 0.95 (0.63, 1.43) | 0.801 |
| higher | 3.04 (1.93, 4.79) | <0.001 | 0.83 (0.51, 1.34) | 0.44 |
| Paid Work (Ref: No paid Work) |  |  |  |
| Yes | 0.97 (0.78, 1.22) | 0.855 | 0.91 (0.72, 1.14) | 0.395 |
| Wealth ranking (Ref: Poorest) |  |  |  |
| Poorer | 1.19 (0.86, 1.66) | 0.281 | 1.21 (0.9, 1.63) | 0.214 |
| Middle | 1.68 (1.22, 2.33) | 0.002 | 1.65 (1.23, 2.22) | 0.001 |
| Richer | 2.41 (1.77, 3.28) | <0.001 | 2.1 (1.55, 2.85) | <0.001 |
| Richest | 3.38 (2.49, 4.58) | <0.001 | 2.57 (1.86, 3.55) | <0.001 |
| Number of family members in the household (Ref:1-4 Members) |  |  |  |
| 5-8 members | 0.95 (0.8, 1.13) | 0.619 | 0.91 (0.77, 1.07) | 0.25 |
| 9 or more members | 0.83 (0.63, 1.09) | 0.188 | 0.82 (0.64, 1.05) | 0.112 |
| Partner's Education level (Ref: No education) |  |  |  |
| Primary | 1.3 (0.99, 1.72) | 0.059 | 0.99 (0.75, 1.29) | 0.924 |
| Secondary | 2.01 (1.52, 2.66) | <0.001 | 1.13 (0.85, 1.5) | 0.385 |
| Higher secondary and above  | 3.32 (2.44, 4.51) | <0.001 | 1.49 (1.05, 2.11) | 0.025 |
| Partner's Occupation (Ref: Service holder and businessman) |  |  |  |
| Agriculture based profession | 0.28 (0.2, 0.38) | <0.001 | 0.6 (0.43, 0.84) | 0.003 |
| Skilled and unskilled workers | 0.47 (0.36, 0.62) | <0.001 | 0.58 (0.44, 0.77) | <0.001 |
| Small business | 0.52 (0.38, 0.72) | <0.001 | 0.66 (0.49, 0.89) | 0.007 |
| Others | 0.51 (0.3, 0.85) | 0.010 | 0.54 (0.33, 0.88) | 0.014 |
| Frequency of media Exposure |  |  |  |
| Newspaper reading |  |  |  |  |
| Reading Newspaper (Ref: Do not read) |  |  |  |  |
| Read newspaper | 1.21 (0.98, 1.5) | 0.067 | 1.15 (0.93, 1.41) | 0.193 |
| Listening Radio (Ref: Do not listen) |  |  |  |
| Listen Radio | 0.66 (0.53, 0.81) | <0.001 | 0.82 (0.66, 1.03) | 0.089 |
| Watching Television (Ref: do not watch) |  |  |  |
| Watch Television | 1.61 (1.35, 1.92) | <0.001 | 1.24 (0.94, 1.64) | 0.127 |
| Current contraceptive using status (Ref: not using) |  |  |  |
| Using contraceptive Method | 0.9 (0.76, 1.05) | 0.208 | 0.8 (0.69, 0.94) | 0.006 |
| Age of first childbirth (Ref: 12-15 years old) |  |  |  |  |
| 16 to 19 years old | 1.18 (0.94, 1.49) | 0.145 | 0.77 (0.61, 0.97) | 0.030 |
| Child ever born of the participants (parity) (Ref: No child) |  |  |  |
| At least one | 0.95 (0.8, 1.13) | 0.61 | 1.22 (0.97, 1.54) | 0.083 |
| More than one | 0.87 (0.63, 1.21) | 0.433 | 1.24 (0.9, 1.72) | 0.18 |
| Year of Survey (ref: 2004) |  |  |  |  |
| 2007 | 1.25 (0.85, 1.84) | 0.248 | 1.2 (0.86, 1.69) | 0.283 |
| 2011 | 1.77 (1.29, 2.42) | <0.001 | 1.64 (1.21, 2.22) | 0.001 |
| 2014 | 2.93 (2.16, 3.99) | <0.001 | 3.03 (2.25, 4.08) | <0.001 |
| 2017 | 3.89 (2.93, 5.17) | <0.001 | 3.97 (2.96, 5.32) | <0.001 |