|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | **2012** | | **P-value** |
| **Characteristics** | | **Developmentally on track** | |
| **Yes** | **No** |
| **N (%)** | **N (%)** |
| **Age of child** | 3 | 2392 (59.46) | 1649(40.54) | <0.001 |
| 4 | 2909 (71.40) | 1198 (28.60) |
| **Child’s sex** | Male | 2669 (63.41) | 1565 (36.59) | 0.002 |
| Female | 2632 (67.65) | 1282 (32.35) |
| **Area** | Urban | 4388(63.72) | 2467 (36.28) | <0.001 |
| Rural | 913 (72.17) | 380 (27.83) |
| **Division** | Barishal | 526 (67.86) | 262 (32.14) | <0.001 |
| Chattogram | 940 (55.04) | 682 (44.96) |
| Dhaka | 1286 (67.45) | 674 (32.55) |
| Khulna | 740 (71.70) | 326 (28.30) |
| Mymensingh | - | - |
| Rajshahi | 527 (66.76) | 263 (33.24) |
| Rangpur | 866 (78.38) | 262 (21.62) |
| Sylhet | 416 (54.15) | 378 (45.85) |
| **Mother’s education** | Primary incomplete | 2076 (58.80) | 1462 (41.20) | <0.001 |
| Primary complete | 772 (62.73) | 447 (37.27) |
| Secondary incomplete | 1800 (70.01) | 760 (29.99) |
| Secondary complete or Higher | 653 (79.46) | 178 (20.54) |
| **Wealth Index** | Poorest | 1503 (58.34) | 1039 (41.66) | <0.001 |
| Second | 1118 (62.85) | 657 (37.15) |
| Middle | 954 (65.97) | 479 (35.03) |
| Fourth | 885 (67.20) | 407 (32.80) |
| Richest | 841 (77.55) | 265 (22.45) |
| **Religion** | Islam | 4486 (66.08) | 2384 (33.92) | 0.044 |
| Others | 534 (61.42) | 321 (38.58) |
| **Household’s sex** | Male | 4411 (65.67) | 2348 (34.33) | 0.852 |
| Female | 609 (65.26) | 357 (34.74) |
| **Ethnicity** | Bengali | 4865 (65.58) | 2620 (34.42) | 0.798 |
| Others | 155 (66.60) | 85 (33.40) |
| **Total** |  | 5301 (65.46) | 2847 (34.54) |  |

**Table.1 Sample characteristics of children by developmental status, MICS 2012.**

**Table.2 Sample characteristics of children by developmental status, MICS 2019.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | **2019** | | **P-value** |
| **Characteristics** | | **Developmentally on track** | |
| **Yes** | **No** |
| **N (%)** | **N (%)** |
| **Age of child** | 3 | 3166 (68.72) | 1584 (31.28) | <0.001 |
| 4 | 3680 (81.26) | 916 (18.74) |
| **Child’s sex** | Male | 3383 (71.51) | 1440 (28.49) | <0.001 |
| Female | 3463 (78.46) | 1060 (21.54) |
| **Area** | Rural | 1305 (78.15) | 430 (21.85) | <0.001 |
| Urban | 5541 (73.99) | 2070 (26.01) |
| **Division** | Barishal | 552 (67.8) | 269 (32.20) | <0.001 |
| Chattogram | 1479 (78.26) | 470 (21.74) |
| Dhaka | 1453 (81.85) | 343 (18.15) |
| Khulna | 895 (73.07) | 409 (26.93) |
| Mymensingh | 347 (61.26) | 209 (38.74) |
| Rajshahi | 720 (69.57) | 307 (30.43) |
| Rangpur | 896 (83.71) | 207 (16.29) |
| Sylhet | 504 (61.73) | 286 (38.27) |
| **Mother’s education** | Pre-primary | 847 (68.53) | 389 (31.47) | <0.001 |
| Primary | 1590 (68.62) | 727 (31.38) |
| Secondary | 3363 (74.63) | 1143 (25.37) |
| Higher secondary + | 1046 (81.27) | 241(18.73) |
| **Wealth Index** | Poorest | 1625 (68.35) | 750 (31.65) | <0.001 |
| Second | 1401 (71.50) | 581 (28.5) |
| Middle | 1287 (75.45) | 462 (24.55) |
| Fourth | 1287 (75.86) | 442 (24.14) |
| Richest | 1246 (84.05) | 264 (15.95) |
| **Religion** | Islam | 6165 (74.90) | 2250 (25.10) | 0.790 |
| Others | 681(74.44) | 250(25.56) |
| **Household’s sex** | Male | 6223 (73.02) | 2299 (26.98) | 0.367 |
| Female | 623 (75.61) | 201 (24.39) |
| **Ethnicity** | Bengali | 6684 (74.89) | 2438 (25.11) | 0.474 |
| Others | 162 (72.70) | 62 (27.30) |
| **Total** | - | 6846 (74.86) | 2500 (25.14) | - |

**Table.3 Factors associated with developmental status of children, MICS 2012.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MICS- 2012** | | | |
| **Univariate** | | **Multi-variate** | |
| **Variables** | **Unadjusted**  **OR (95% CI)** | **P-value** | **Adjusted**  **OR (95% CI)** | **P-value** |
| **Age of child** |  |  |  |  |
| 4 | 1.70 (1.52-1.91) | <0.001 | 1.78 (1.58-2.01) | <0.001 |
| 3 | Reference | - | Reference | - |
| **Child’s sex** |  |  |  |  |
| Female | 1.21 (1.07-1.36) | 0.002 | 1.27 (1.12-1.44) | <0.001 |
| Male | Reference | - | Reference | - |
| **Area** |  |  |  |  |
| Rural | 1.48 (1.21-1.79) | <0.001 | 1.28 (1.05-1.57) | 0.013 |
| Urban | Reference | - | Reference |  |
| **Division** |  |  |  |  |
| Chattogram | 0.58 (0.47-0.71) | <0.001 | 0.49 (0.39-0.62) | <0.001 |
| Dhaka | 0.98 (0.80-1.20) | 0.859 | 0.87 (0.70-1.08) | 0.217 |
| Khulna | 1.20 (0.97-1.49) | 0.097 | 1.07 (0.84-1.36) | 0.553 |
| Rajshahi | 0.95 (0.75-1.20) | 0.675 | 0.92 (0.71-1.18) | 0.514 |
| Rangpur | 1.72 (1.38-2.13) | <0.001 | 1.71 (1.36-2.14) | <0.001 |
| Sylhet | 0.56 (0.44-0.71) | <0.001 | 0.59 (0.46-0.75) | <0.001 |
| Barishal | Reference | - | Reference |  |
| **Mother’s education level** |  |  |  |  |
| Secondary complete or Higher | 2.71 (2.14-3.43) | <0.001 | 1.89 (1.46-2.46) | <0.001 |
| Secondary incomplete | 1.64 (1.43-1.87) | <0.001 | 1.43 (1.22-1.68) | <0.001 |
| Primary complete | 1.17 (0.99-1.40) | 0.062 | 1.16 (0.96-1.39) | 0.117 |
| Primary incomplete | Reference | - | Reference | - |
| **Wealth Index** |  |  |  |  |
| Richest | 2.47 (1.98-3.08) | <0.001 | 1.82 (1.38-2.40) | <0.001 |
| Fourth | 1.46 (1.22-1.75) | <0.001 | 1.24 (1.01-1.52) | 0.040 |
| Middle | 1.32 (1.12-1.56) | 0.001 | 1.22 (1.01-1.47) | 0.036 |
| Second | 1.21 (1.04-1.41) | 0.014 | 1.06 (0.90-1.26) | 0.482 |
| Poorest | Reference | - | Reference | - |
| **Religion** |  |  |  |  |
| Islam | 1.22 (1.01-1.49) | 0.045 | 1.29 (1.03-1.62) | 0.029 |
| Others | Reference | - | Reference | - |
| **Household’s sex** |  |  |  |  |
| Female | 0.98 (0.81-1.19) | 0.852 | 1.04 (0.86-1.26) | 0.656 |
| Male | Reference | - | Reference | - |
| **Ethnicity** |  |  |  |  |
| Bengali | 0.96 (0.67-1.35) | 0.799 | 0.72 (0.48-1.06) | 0.095 |
| Others | Reference | - | Reference | - |

**Table.4 Factors associated with developmental status of children, MICS 2019.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **MICS- 2019** | | | |
| **Uni-variate** | | **Multi-variate** | |
| **Variables** | **Unadjusted**  **OR (95% CI)** | **P-value** | **Adjusted**  **OR (95% CI)** | **p-value** |
| **Age of child** |  |  |  |  |
| 4 | 1.97 (1.77-2.20) | <0.001 | 2.08 (1.85-2.32) | <0.001 |
| 3 | Reference | - | Reference | - |
| **Child’s sex** |  |  |  |  |
| Female | 1.45 (1.31-1.61) | <0.001 | 1.47 (1.32-1.63) | <0.001 |
| Male | Reference | - | Reference | - |
| **Area** |  |  |  |  |
| Rural | 1.26 (1.09-1.44) | <0.001 | 0.89 (0.77-1.03) | 0.125 |
| Urban | Reference | - | Reference | - |
| **Division** |  |  |  |  |
| Chattogram | 1.71 (1.43 - 2.05) | <0.001 | 1.55 (1.27-1.89) | <0.001 |
| Dhaka | 2.14 (1.77 -2.60) | <0.001 | 1.91 (1.56-2.34) | <0.001 |
| Khulna | 1.29 (1.07-1.55) | 0.008 | 1.18 (0.96-1.43) | 0.101 |
| Mymenshing | 0.75 (0.59 - 0.95) | 0.017 | 0.77 (0.60-0.98) | 0.035 |
| Rajshahi | 1.09 (0.88-1.33) | 0.430 | 1.04 (0.84-1.29) | 0.719 |
| Rangpur | 2.44 (0.62-0.95) | <0.001 | 2.59 (2.10-3.19) | <0.001 |
| Sylhet | 0.77 (0.62-0.95) | 0.015 | 0.75 (0.60-0.93) | 0.010 |
| Barishal | Reference | - | Reference | - |
| **Mother’s education level** |  |  |  |  |
| Higher secondary + | 2.26 (1.82-2.79) | <0.001 | 1.76 (1.38-2.23) | <0.001 |
| Secondary | 1.53 (1.31-1.78) | <0.001 | 1.37 (1.16-1.62) | <0.001 |
| Primary | 1.04 (0.88-1.23) | 0.651 | 1.04 (0.87-1.23) | 0.689 |
| Pre-primary or none | Reference | - | Reference | - |
| **Wealth Index** |  |  |  |  |
| Richest | 2.44 (2.04 -2.93) | <0.001 | 1.85 (1.47-2.31) | <0.001 |
| Fourth | 1.45 (1.24-1.70) | <0.001 | 1.17 (0.98-1.40) | 0.084 |
| Middle | 1.42 (1.22-1.66) | <0.001 | 1.22 (1.03-1.46) | 0.019 |
| Second | 1.16 (1.00-1.35) | 0.051 | 1.07 (0.91-1.25) | 0.412 |
| Poorest | Reference | - | Reference | - |
| **Religion** |  |  |  |  |
| Islam | 1.02 (0.86-1.22) | 0.790 | 1.08 (0.88-1.33) | 0.451 |
| Others | Reference | - | Reference | - |
| **Household’s sex** |  |  |  |  |
| Female | 1.08 (0.91-1.29) | 0.368 | 0.95 (0.79-1.14) | 0.551 |
| Male | Reference | - | Reference | - |
| **Ethnicity** |  |  |  |  |
| Bengali | 1.12 (0.82-1.53) | 0.474 | 0.93 (0.63-1.39) | 0.735 |
| Others | Reference | - | Reference | - |

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| **Fig 1. Distribution of developmental status of children by different survey years.** |