**Table 1 Sociodemographic and Basic Participants Information**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Counts(N)** | **Percentage (%)** |
| **Total** | **9,105,756** |  |
| **Country** | | |
| Afghanistan | 405,124 | 4.45 |
| Bangladesh | 5,111,218 | 56.13 |
| Maldives | 24,153 | 0.27 |
| Nepal | 2,215,179 | 24.33 |
| Sri Lanka | 1,350,082 | 14.83 |
| **Gender** | | |
| Male | 5,260,312 | 57.77 |
| Female | 3,755,871 | 41.25 |
| Missing | 89,572 | 0.98 |
| **Age Group** | | |
| 11 years old or younger | 71,496 | 0.79 |
| 12 to 14 years | 5,301,842 | 58.23 |
| 15 to 17 years | 3,588,872 | 39.41 |
| 18 years old or older | 106,134 | 1.17 |
| Missing | 37,412 | 0.41 |
| **Education Category** | | |
| Higher Secondary | 558,715 | 6.14 |
| Lower Secondary | 4,591,875 | 50.43 |
| Middle Secondary | 3,874,353 | 42.55 |
| Missing | 80,813 | 0.89 |
| **Substance Use Category** | | |
| None | 7,947,565 | 87.28 |
| 1 Substance | 455,623 | 5 |
| 2 Substances | 299,270 | 3.29 |
| 3 Substances | 76,519 | 0.84 |
| Missing | 326,779 | 3.59 |
| **Drug Initiation Age** | | |
| Never used | 8,340,864 | 91.6 |
| <13 years of age | 345,207 | 3.79 |
| 13-18 years of age | 95,806 | 1.05 |
| Missing | 323,879 | 3.56 |
| **Hunger Category** | | |
| Never | 4,578,117 | 50.28 |
| Often | 882,543 | 9.69 |
| Sometimes | 3,526,090 | 38.72 |
| Missing | 119,006 | 1.31 |
| **School Truancy** | | |
| Never | 6,156,654 | 67.61 |
| Often | 366,201 | 4.02 |
| Sometimes | 2,309,882 | 25.37 |
| Missing | 273,018 | 3 |
| **Felt Lonely** | | |
| Yes | 5,473,949 | 60.12 |
| No | 3,514,412 | 38.6 |
| Missing | 117,394 | 1.29 |
| **Considered Suicide** | | |
| Yes | 742,980 | 8.16 |
| No | 8,141,537 | 89.41 |
| Missing | 221,238 | 2.43 |
| **Was Injured And Type** | | |
| Not seriously injured | 4,818,564 | 52.92 |
| Broken bone/dislocated joint | 419,271 | 4.6 |
| I had a cut or stab wound | 1,701,521 | 18.69 |
| Concussion/head injury | 329,617 | 3.62 |
| I had a gunshot wound | 27,850 | 0.31 |
| I had a bad burn | 105,546 | 1.16 |
| I was poisoned | 29,837 | 0.33 |
| Something else happened to me | 587,265 | 6.45 |
| Missing | 1,086,287 | 11.93 |
| **Friends Helpful** | | |
| Never | 1,272,819 | 13.98 |
| Rarely | 675,839 | 7.42 |
| Sometimes | 1,994,825 | 21.91 |
| Most of the time | 2,809,273 | 30.85 |
| Always | 2,004,448 | 22.01 |
| Missing | 348,553 | 3.83 |
| **Bullying** | | |
| None | 5,896,455 | 64.76 |
| 1-9 days | 2,739,382 | 30.08 |
| 10 or more days | 239,236 | 2.63 |
| Missing | 230,682 | 2.53 |
| **Number of Close Friends** | | |
| 0 | 652,691 | 7.17 |
| 1 | 1,846,635 | 20.28 |
| 2 | 1,983,655 | 21.78 |
| 3 or more | 4,483,266 | 49.24 |
| Missing | 139,509 | 1.53 |
| **Engaged In Physical Fight** | | |
| No | 6,317,619 | 69.38 |
| Yes | 2,751,536 | 30.22 |
| Missing | 36,600 | 0.4 |
|  | **Total** | **Mean(SD)** |
| Weight (Mtr) | 9,105,754 | 1.55(0.1) |
| Height (Kg) | 9,105,754 | 45.8(10.49) |
| Missing | 1,548,634 | ------ |

Table 1 present basic information of the study participants, the study comprises of 9,105,756 youth across five South Asian countries. Bangladesh represented the largest proportion of the sample (56.13%), followed by Nepal (24.33%), Sri Lanka (14.83%), Afghanistan (4.45%), and Maldives (0.27%). The gender distribution showed a slight male predominance (57.77%) compared to females (41.25%), with 0.98% missing data. The sample primarily comprised adolescents aged 12-14 years (58.23%) and 15-17 years (39.41%), with smaller proportions in the extreme age groups (0.79% ≤11 years; 1.17% ≥18 years). Educational distribution revealed that half of the participants were in lower secondary education (50.43%), followed by middle secondary (42.55%) and higher secondary (6.14%). Substance use patterns indicated that the majority of youth (87.28%) reported no substance use, while 5% reported using one substance and 4.13% reported multiple substance use. Notably, among those who reported drug use, early initiation (<13 years) was more common (3.79%) than later initiation (1.05%).

A concerning proportion of youth reported feeling lonely (60.12%) and 8.16% had considered suicide. The prevalence of physical fighting was substantial, with 30.22% of participants reporting engagement in fights. School attendance patterns showed that while 67.61% reported never skipping school, a notable proportion reported occasional (25.37%) or frequent (4.02%) truancy. Social support indicators revealed varied patterns of peer relationships. Nearly half of the participants (49.24%) reported having three or more close friends, while 7.17% reported having no close friends. Peer support was generally positive, with 52.86% reporting friends being helpful "most of the time" or "always." However, bullying emerged as a significant concern, with 32.71% experiencing bullying (30.08% for 1-9 days and 2.63% for 10 or more days).

Food insecurity was notably prevalent, with 48.41% of participants reporting experiencing hunger either sometimes (38.72%) or often (9.69%). Injury experiences were diverse, with cut or stab wounds being the most common (18.69%), followed by other types of injuries including broken bones (4.6%) and head injuries (3.62%).Anthropometric measurements indicated a mean height corresponding to age-appropriate norms, though with considerable variation (mean weight: 45.8 kg, SD: 10.49; mean height measurement: 1.55 meters, SD: 0.1), noting that 1,548,634 participants had missing anthropometric data.

**Table 2 Physical Fighting and Their Correlates**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.N** | **Physical Fight Among Youth Model** | | **Multivariable Model** | |
| **Intercept** | **-1.66814** | **OR (95% CI)** | **p-value** |
|  | **Country** | |  |  |
| 1 | Afghanistan | reference | |  |
| 2 | Bangladesh |  | 0.42 (0.31–0.59) | <0.001 |
| 3 | Maldives |  | 0.67 (0.50 – 0.89) | 0.007 |
| 4 | Nepal |  | 1.16 (0.85 – 1.58) | 0.345 |
| 5 | Sri Lanka |  | 2.62 (1.91 – 3.58) | <0.001 |
|  | **Gender** | |  |  |
| 1 | Male | reference | |  |
| 2 | Female |  | 0.44 (0.36 – 0.54) | <0.001 |
|  | **Education** | |  |  |
| 1 | Higher Secondary | reference | |  |
| 2 | Lower Secondary |  | 1.78 (1.41 – 2.26) | <0.001 |
| 3 | Middle Secondary |  | 1.55 (1.24 – 1.95) | <0.001 |
|  | **Felt Lonely** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.42 (1.17 – 1.73) | <0.001 |
|  | **Could Not Sleep** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.61 (1.36 – 1.91) | <0.001 |
|  | **Considered Suicide** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.33 (1.03 – 1.71) | 0.027 |
|  | **Injuries** | |  |  |
|  | **Bone Injury** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.35 (0.91 – 2.01) | 0.134 |
|  | **Cut Injury** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.38 (0.98 – 1.94) | 0.066 |
|  | **Head Injury** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 1.26 (0.83 – 1.91) | 0.282 |
|  | **Serious Injury** | |  |  |
| 1 | No | reference | |  |
| 2 | Yes |  | 2.01 (1.61 – 2.52) | <0.001 |
|  | **Drug Initiation Age** | |  |  |
| 1 | Never Used | reference | |  |
| 2 | <13 Years |  | 1.13 (0.72–1.77) | 0.589 |
| 3 | 13-18 Years |  | 2.12 (1.19 – 3.79) | 0.011 |
|  | **Hunger Category** | |  |  |
| 1 | Never | reference | |  |
| 2 | Sometimes |  | 1.20 (0.97 – 1.49) | 0.09 |
| 3 | Often |  | 1.77 (1.05 – 2.97) | 0.031 |
|  | **School Truancy** | |  |  |
| 1 | Never | reference | |  |
| 2 | Sometimes |  | 1.25 (0.98 – 1.60) | 0.077 |
| 3 | Often |  | 1.15 (0.63 – 2.09) | 0.643 |

Table 2 a multivariable analysis shows significant geographic variations among youths and physical fighting across South Asian countries. Notably, Sri Lankan youth demonstrate 2.62 times higher odds (95% CI: 1.91-3.58, p<0.001) of engaging in physical fights compared to reference group Afghani counterparts, while Bangladesh shows a protective effect with 58% lower odds (OR: 0.42, 95% CI: 0.31-0.59, p<0.001). These differences reflect the complex interplay of sociocultural factors as well as countries’ variations that shape young people's behavioral responses.

Gender emerges as a powerful predictor, with female students showing 56% lower odds of physical fighting (OR: 0.44, 95% CI: 0.36-0.54, p<0.001) compared to males. This substantial difference likely reflects not just biological factors, but deeply embedded societal norms and expectations that influence how young people, particularly boys, learn to express distress and resolve conflicts. The educational gradient reveals that student in lower secondary education face 1.78 times higher odds of fighting (95% CI: 1.41-2.26, p<0.001), highlighting a critical period when young adolescents might need additional support as they navigate complex social dynamics and emotional development.

The mental health correlation shows a particularly clear picture with loneliness (OR: 1.42, 95% CI: 1.17-1.73), sleep difficulties (OR: 1.61, 95% CI: 1.36-1.91), and suicidal ideation (OR: 1.33, 95% CI: 1.03-1.71) all significantly increase the likelihood of physical fighting among youths. These associations prompt us that behind many aggressive encounters are young people struggling with profound emotional pain and isolation. When we see that serious injuries are associated with double odds of fighting (OR: 2.01, 95% CI: 1.61-2.52), we're likely observing a concerning cycle where violence begets violence.

The socioeconomic indicators, in our data a hunger of youth shows, a frequent hunger increases physical fight odds by 77% (OR: 1.77, 95% CI: 1.05-2.97, p=0.031), while drug initiation between ages 13-18 more than doubles the odds (OR: 2.12, 95% CI: 1.19-3.79, p=0.011). These findings show how basic needs insecurity and substance use during crucial developmental periods can profoundly impact behavioral outcomes.