Supplementary Tables:

SupplementaryTable 1: Demographics and ever and tobacco use of past 30-day among school going adolescents (count and %)**:** data from Bangladesh, India, Pakistan and Sri-Lanka

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Bangladesh  *(N= 3,245 )* | India  *(N= 11,744 )* | Pakistan  *(N= 8,676 )* | SriLanka  *(N= 1,503 )* | Overall  *(N= 25,074 )* |
| n (%) | n (%) | n (%) | n (%) | n (%) |
| Age  *≤11 - 12 years old*  *13-15 years old*  *16-≥17 years old* | *40 (1.23)*  *3,186 (98.27)*  *16 (0.49)* | *967 (8.30)*  10,112 *(86.78)*  573 *(4.92)* | 1,286 *(*14.82*)*  5,832 *(*67.22*)*  1,558 *(*17.96*)* | *050 (3.32)*  1,416 *(*94.15*)*  *38 (*2.53*)* | 2,343 (9.34)  20,546 (81.94)  2,185 (8.71) |
| Sex  *Male*  *Female* | *1,411 (43.48)*  *1,834 (56.52)* | *5,686 (49.12)*  *5,890 (50.88)* | *3,987 (46.10)*  *4,661 (53.90)* | *767 (51.03)*  *736 (48.97)* | 11,851 (47.46)  13,121 (52.54) |
| **Cigarette use** | | | | | |
| Ever tried cigarette  *No*  *Yes* | *2,925 (93.57)*  *201 (6.43)* | *10,693 (93.48)*  *746 (6.52)* | *7,092 (87.04)*  *1,056 (12.96)* | *1,405 (94.23)*  *86 (5.77)* | *22,115 (91.37)*  *2,089 (8.63)* |
| Any smoking cig in past 30 days  *No*  *Yes* | *3,077 (98.37)*  *51 (1.63)* | *10,880 (95.99)*  *454 (4.01)* | *7,808 (97.10)*  *233 (2.90)* | *1,464 (98.39)*  *24 (1.61)* | 23,229 (96.82)  762 (3.18) |
| **Smokeless tobacco use** | | | | | |
| Ever tried Smokeless tobacco  *No*  *Yes* | *2,736 (85.77)*  *454 (14.23)* | *9,980 (85.65)*  *1,672 (14.35)* | *7,424 (88.78)*  *938 (11.22)* | *1,389 (93.60)*  *95 (6.40)* | 21,529 (87.20)  3,159 (12.80) |
| Any use in past 30-days  *No*  *Yes* | *3,078 (95.92)*  *131 (4.08)* | *10,770 (91.71)*  *974 (8.29)* | *7,897 (94.48)*  *461 (5.52)* | *1,079 (71.74)*  *425 (28.26)* | *22,824 (91.98)*  *1,991 (8.02)* |
| Cigarette smoke and/or ST use in past 30 days  *Neither smoked cig nor any ST use*  *Only smoked cigarette*  *Only used ST*  *Both smoked cigarette and used ST* | *2,929 (94.73)*  *41 (1.33)*  *112 (3.62)*  *10 (0.32)* | *10,178 (89.93)*  *277 (2.45)*  *690 (6.10)*  *173 (1.53)* | *7,265 (93.33)*  *140 (1.80)*  *320 (4.11)*  *59 (0.76)* | *1,058 (71.15)*  *11 (0.74)*  *405 (27.24)*  *13 (0.87)* | *21,430 (90.49)*  *469 (1.98)*  *1,527 (6.45)*  *255 (1.08)* |

SupplementaryTable 2: Exposure to pro-tobacco factors for tobacco use among school going adolescents (count and %)**:** data from Bangladesh, India, Pakistan and Sri-Lanka

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Bangladesh | India | Pakistan | SriLanka | Overall |
| *(n= 3241 )* | *(n= 11,714 )* | *(n= 8,645 )* | *(n= 1,502)* | *(n,max= 25,148)* |
| Exposure to cigarette smokingat any public places  *No*  *Yes* | *1,007 (31.06)*  *2,235 (68.94)* | *7,472 (63.79)*  *4242 (36.21)* | *4,982 (57.35)*  *3,705 (42.65)* | *863 (57.34)*  *642 (42.66)* | *14,324 (56.96)*  *10,824 (43.04)* |
| Offered free tobacco product ever  *No*  *Yes* | *113 (3.51)*  *3,104 (96.49)* | *#*  *1,071 (9.43)*  *10,292 (90.57)* | *775 (9.39)*  *7,477 (90.61)* | *30 (2.01)*  *1,459 (97.99)* | 21,990 (89.61)  2,551 (10.39) |
| Exposed to tobacco use in electronic media in last 30 days  *Did not watch TV*  *Yes*  *No* | *635 (19.59)*  *2,039 (62.91)*  *567 (17.49)* | *1*  *2,007 (17.33)*  *(A lot+ Sometimes) 8,673 (74.88)*  *903 (7.80)* | *2,514 (29.62)*  *3,883 (45.75)*  *2,091 (24.63)* | *183 (12.18)*  *1,098 (73.10)*  *221 (14.71)* | 5,339 (21.52) 15,693 (63.24)  3,782 (15.24) |

# getting offer of free cigarette and free ST was combined to get this free offer of tobacco, 1 ‘A lot’ and ‘sometimes’ were merged as ‘yes’

SupplementaryTable 3: Exposure to anti-tobacco factors among school going adolescents (count and %)**:** data from Bangladesh, India, Pakistan and Sri-Lanka

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Bangladesh | India | Pakistan | SriLanka | Overall |
|  | *(n= 3,231 )* | *(n= 11,583 )* | *(n= 8,545 )* | *(n= 1,502)* | *(n, max=* 25,001 *)* |
| Refused to purchase cigarettes  (Past 30 days)  *Did not try to buy cigarettes*  *Yes, someone refused to sell*  *No, age didn’t keep me from buying* | *2,972 (91.98)*  *107 (3.31)*  *152 (4.70)* | *10,458 (89.68)*  *649 (5.57)*  *555 (4.76)* | *7,742 (89.96*  *483 (5.61)*  *381 (4.43)* | *1,467 (97.67)*  *29 (1.93)*  *6 (0.40)* | 22,639(90.55)  1,268 (5.07)  1,094(4.38) |
| Exposure to anti-tobacco mass media messages (past 30 days)  *Yes*  *No* | *2,281 (71.04)*  *930 (28.96)* | 2  (A lot +A few) 9,257 (79.85)  2336 (20.15) | *4,413 (52.08)*  *4,060 (47.92)* | *1,331 (88.62)*  *171 (11.38)* | 17,282 (69.74) 7,497 (30.26) |
| Exposure to anti-tobacco messages at community events (past 30 days)  *I did not go to any event in past month*  *Yes*  *No* | *1,692 (52.51)*  *867 (26.91)*  *663 (20.58)* | *1*  *2,349 (20.18)*  *(A lot+Sometime) 7,667 (65.85)*  *1,627 (13.97)* | *3,843 (44.85)*  *1,780 (20.77)*  *2,945 (34.37)* | *841 (56.37)*  *361 (24.20)*  *290 (19.44)* | 8,725 (35.01)  10,675 (42.83)  5,525 (22.17) |
| Taught in class on dangers of tobacco (past 12 months)  *Yes*  *No*  *I don’t know* | *1,870 (57.88)*  *879 (27.21)*  *482 (14.92)* | *\**  *7,385 (63.49)*  *2,940 (25.28)*  *1,307 (11.24)* | *3,988 (46.92)*  *3,297 (38.79)*  *1,215 (14.29)* | *1,190 (79.23)*  *162 (10.79)*  *150 (9.99)* | 1  4,433 (58.05)  7,278 (29.27)  3,154 (12.68) |

\* taught about smoking

1 ‘A lot’ and ‘sometimes’ were merged as ‘yes’

2 ‘A lot’ and ‘a few’ were merged as ‘yes’

SupplementaryTable 4: Exposure to additional pro- and anti- tobacco factors among school going adolescents (count and %): Bangladesh, Pakistan and Sri-Lanka (apart from India)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Bangladesh | Pakistan | SriLanka | Overall |
| Exposed to tobacco advertisement at point of sale in last 30 days  *Did not visit POS in last 30 days*  *Yes*  *No* | *1,314 (40.71)*  *929 (28.78)*  *985 (30.51)* | *2,570 (30.07)*  *2,035 (23.81)*  *3,943 (46.13)* | *201 (13.44)*  *570 (38.10)*  *725 (48.46)* | 4,085 (16.53)  12,191 (49.33)  8,439 (34.15) |
| Past 30 days any cigarette exposure at school  Yes  No | *1,231 (38.19)*  *1,992 (61.81)* | *1,790 (21.13)*  *6,683 (78.87)* | *445 (29.75)*  *1,051 (70.25)* | 3,466 (26.27)  9,726 (73.73) |
| Health warning on cigarette pack  *Yes, I didn’t think*  *Yes, it led me to think*  *No* | *1,538 (47.75)*  *419 (13.01)*  *1,264 (39.24)* | *3,702 (43.32)*  *956 (11.19)*  *3,887 (45.49)* | *441 (29.56)*  *257 (17.23)*  *794 (53.22)* | 5,681 (42.85)  1,632 (12.31)  5,945 (44.84) |

SupplementaryTable 5: Association between tobacco use (Exclusive smoking, Exclusive ST and dual use) *(Ref category: non-smoker and non ST user)* and related covariates with the added three factors\* (result of adjusted analyses of Multinomial logistic regression): data from Bangladesh, Pakistan and Sri-Lanka (N=11,231)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Exclusive smoking | | | Exclusive ST use | | | Use of both forms | | |
|  |  | RRR | 95% CI | P value | RRR | 95% CI | P value | RRR | 95% CI | P value |
| *Anti-tobacco factors* |  |  |  |  |  |  |  |  |  |  |
| Refused to purchase cigarettes  (Past 30 days)*(ref:No)* |  |  |  |  |  |  |  |  |  |  |
|  | *did not try to buy* | *0.05* | *0.03 0.08* | *<0.001* | *0.24* | *0.17, 0.33* | *<0.001* | *0.03* | *0.01, 0.05* | *<0.001* |
|  | *Yes* | *0.87* | *0.53 1.43* | *0.591* | *0.35* | *0.22, 0.59* | *<0.001* | *0.37* | *0.18, 0.78* | *0.009* |
| *Exposure to anti-tobacco mass media messages (past 30 days)*  *(ref=No)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes* | *1.09* | *0.74, 1.60* | *0.667* | *0.66* | *0.55, 0.80* | *<0.001* | *0.83* | *0.45, 1.53* | *0.554* |
| *Exposure to anti-tobacco messages at community events (past 30 days)*  *(ref: No)* |  |  |  |  |  |  |  |  |  |  |
|  | *I did not go to any event in past month* | *0.49* | *0.31, 0.76* | *0.002* | *0.69* | *0.56 0.85* | *0.001* | *0.32* | *0.15, 0.70* | *0.004* |
|  | *Yes* | *0.76* | *0.48, 1.19* | *0.231* | *2.40* | *1.95, 2.95* | *<0.001* | *1.71* | *0.91, 3.24* | *0.097* |
| *Taught in class on**dangers of tobacco in past 12 month(ref=No)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes* | *1.37* | *0.91, 2.08* | *0.133* | *1.08* | *0.89, 1.31* | *0.413* | *0.71* | *0.38, 1.33* | *0.290* |
|  | *I don’t know* | *1.82* | *1.04, 3.15* | *0.034* | *1.48* | *1.17, 1.87* | *0.001* | *0.72* | *0.28, 1.86* | *0.501* |
| \*Health warning on cig. pack  *(ref: No)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes, I didn’t think* | *2.00* | *1.26, 3.17* | *0.003* | *1.02* | *0.85, 1.22* | *0.821* | *4.16* | *1.75, 9.92* | *0.001* |
|  | *Yes, it led me to think* | *2.25* | *1.32, 3.83* | *0.003* | *0.92* | *0.72, 1.19* | *0.546* | *3.94* | *1.55, 10.02* | *0.004* |
| *Tobacco use motivating factors* |  |  |  |  |  |  |  |  |  |  |
| *Exposed to tobacco use in electronic media in last 30 days**(ref: No)* |  |  |  |  |  |  |  |  |  |  |
|  | *Did not watch TV in last 30 days* | *1.44* | *0.74, 2.81* | *0.285* | *1.32* | *1.02, 1.72* | *0.037* | *1.30* | *0.45, 3.76* | *0.624* |
|  | *Yes* | *1.77* | *0.98, 3.20* | *0.056* | *1.29* | *1.02, 1.63* | *0.033* | *1.52* | *0.61, 3.76* | *0.364* |
| *Offered free tobacco product ever*  *(ref: no)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes* | *1.72* | *1.02, 2.89* | *0.041* | *1.71* | *1.28, 2.28* | *<0.001* | *3.58* | *1.84, 6.98* | *<0.001* |
| *Exposure to cigarette at any public places (ref: no)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes* | *2.31* | *1.50, 3.57* | *<0.001* | *1.22* | *1.03, 1.44* | *0.020* | *3.45* | *1.60, 7.46* | *0.002* |
| *\*Exposure to cigarette at school premises (ref: No)* |  |  |  |  |  |  |  |  |  |  |
|  | *Yes* | *1.75* | *1.22, 2.52* | *0.002* | *0.81* | *0.68, 0 .97* | *0.022* | *0.33* | *0.19, 0.58* | *0.000* |
| *\*Exposed to tobacco advertisement at the point of sell in last 30 days**(ref: No)* |  |  |  |  |  |  |  |  |  |  |
|  | *I did not visit any* | *0.90* | *0.54, 1.50* | *0.690* | *0.90* | *0.73, 1.11* | *0.348* | *0.36* | *0.13, 1.00* | *0.051* |
|  | *Yes* | *1.06* | *0.70, 1.59* | *0.792* | *0.82* | *0.68, 1.00* | *0.048* | *0.76* | *0.42, 1.36* | *0.352* |
| *Other co-variates* |  |  |  |  |  |  |  |  |  |  |
| *Sex (ref: male)* |  |  |  |  |  |  |  |  |  |  |
|  | *female* | *0.30* | *0.19, 0.48* | *<0.001* | *0.75* | *0.64, 0.88* | *0.001* | *0.20* | *0.09, 0.48* | *<0.001* |
| *Age (ref:* ≤*11-12 years)* |  |  |  |  |  |  |  |  |  |  |
|  | *13-15 years old* | *1.91* | *0.80, 4.54* | *0.145* | *2.23* | *1.57, 3.15* | *<0.001* | *0.51* | *0.44, 5.22* | *0.510* |
|  | *16-*≥*17 years old* | *4.80* | *1.94, 11.84* | *0.001* | *2.12* | *1.42, 3.17* | *<0.001* | *0.07* | *0.90, 12.18* | *0.405* |

\*Additionally adjusted factors

SupplementaryTable 6: Comparison of nationally representative data and data reported in this study: Prevalence of current cigarette smoking and current smokeless tobacco use

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Nationally representative data (13-15 years old) | | Data reported in this study | |
|  | Current cigarette Smoking  prevalence (%) | Current smokeless tobacco use prevalence (%) | Cigarette smoking in  past 30 days  (%) | Smokeless tobacco use in  past 30 days  (%) |
| BD | 7.0  and 2.1\* | 4.5 | 1.63 | 4.08 |
| India | 4.4 | 9.0 | 4.01 | 8.29 |
| Pakistan | 3.3 | 5.3 | 2.90 | 5.52 |
| Sri Lanka | 1.5 | *2.4* | 1.61 | *28.26* |

Data source (Based GYTS data set of these countries (same years’ GYTS data as reported in this study)

: World Health Organization. (‎2017)‎. WHO report on the global tobacco epidemic, 2017: monitoring tobacco use and prevention policies.

<https://apps.who.int/iris/handle/10665/255874>

\*GYTS Bangladesh. Global Youth Tobacco Survey (GYTS) Fact Sheet Bangladesh 2013.; 2013.

Available at: http://origin.searo.who.int/tobacco/data/ban\_gyts\_factsheet\_2013.pdf?ua=1.

The current ST prevalence in Sri Lanka was lower in National data (2.4) than our study population (28.26), which might be due to data categorization or data cleaning issues. In our data set we included all the responses of ≥ 1 days of ST use in the past 30 days as a user.