

Mental Health Status of Adolescents in South-East Asia: Evidence for Action

April, 2017





Cover credit: Musanna Nabi Chowdhury, 21, Bangladesh Best concept design, Category B (age 18-25 years), WHO South-East Asia Regional MindART Competition on the World Health Day 2017 theme on depression

Explanation of the artwork by the young artist:

"It is difficult to help those who don't admit they are hurting. Losing self-esteem every day, they fail to make space for themselves in this colourful world. They need to open-up to someone, talk their way out of the dark world. A little bit of nurturing and a whole lot of love and attention can do wonders for them!"

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Acronyms

CDC Centers for Disease Control and Prevention, Atlanta, USA

CI Confidence Interval

DALYs The disability-adjusted life years

GSHS Global School-based Student Health Surveys

SEA South-East Asia

SDGs Sustainable Development Goals

SEAR South-East Asia Region

WHO World Health Organization

Foreword



Mental health and substance use disorders are one of the largest contributors to the regional and global burden of disease. Overall, more than 6% of the global burden of disease is attributed to these disorders. According to WHO's Global Health Estimates 2015, suicide or self-harm is the second most common cause of mortality – after road-traffic injuries – among people aged 15–29 years in the South-East Asia Region. Mental health problems in young people thus present not only a major public health challenge but are also a development issue in low- and middle-income countries and may be central to achieving different Sustainable Development Goals.

Recognizing and addressing mental health needs of young people help them function better socially, academically and vocationally,

and develop into well-adjusted and productive adults. An urgent task in addressing adolescent mental health is improving and expanding the evidence base, particularly in resource-constrained countries. The evidence is required not only to inform policies and programmes but also to generate public awareness of mental health issues and mobilize social support for adolescents.

The theme of World Health Day 2017 is Depression. The campaign slogan is "Depression: Let's Talk". Having "depression" as the theme of World Health Day acknowledges the public health importance of mental health issues and of depression in particular, and recognizes the burden these conditions place on individuals, families and communities. I am pleased that this publication "Mental Health Status of Adolescents in South-East Asia: Evidence for Action" is being launched on the eve of World Health Day 2017. This report presents evidence on mental health and substance use collected in Global School-based Student Health Surveys among adolescents aged 13–17 years. These surveys assess the leading causes of morbidity and mortality among school-going adolescents and have been supported by WHO and the Centers for Disease Control, Atlanta, USA in all Member States of the WHO South-East Asia Region.

I hope the information provided in this publication will encourage evidence-based and context-relevant policy actions for promotion of mental health and mental well-being of adolescents in the Region and eventually to a better-adjusted and productive adult workforce in the WHO SEA Region.

Dr Poonam Khetrapal Singh Regional Director

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1 Introduction

Adolescence, usually defined as the period between 10 and 19 years of age, is the phase of transition from a "child" into an "adult". These are the formative as well as impressionable years when substantial physical, psychological and behavioural changes take place. Adolescents constitute an important social and demographic group in the WHO South-East Asia Region accounting for almost one fifth or 18.8% (362.2 million individuals) of the total regional population (*UN Population Prospects, 2016*). Of this, 13–17 year olds comprise 181 million or nearly one tenth (9.4%) of total regional population (*UN Population Prospects, 2016*). In the coming years, the group may account for even a larger share of the total population as fertility rates decline further.

Mental health problems are estimated to affect 10–20% of children and adolescents worldwide, accounting for 15–30% of Disability-Adjusted Life Years (DALYs) lost during the first three decades of life (*Kieling, Baker-Henningham et al. 2011*). Suicide or self-harm, itself, accounts for an estimated 6% of all deaths among 15–29 year olds population and is the second leading cause of death in this age group after road-traffic injuries (*WHO, 2014*). The estimated suicide rates per 100,000 populations in this age group varied from 3.6 in Indonesia to 25.8 in Nepal to 35.5 in India (*WHO, 2014*) (see Part III – Table 1) However, the 'reported' suicide rate in the countries may be much lower due to stigma, social taboos, and legal issues around reporting of suicide, and hence may significantly underestimate the problem.

The physical, psychological, and behavioural changes taking place during adolescence contribute to many of these mental health problems. Many mental health disorders first emerge in late childhood and early adolescence and may continue into adulthood. However, mental health disorders such as anxiety and depression in early adolescence often go undiagnosed and untreated, especially in developing countries, due to limited access to psychological and psychiatric services and substantial social stigma attached to mental health issues.

Mental health issues such as depression, anxiety, or other conditions may lead to behavioural problems at home and school, increased participation in risk-taking behaviours, such as tobacco, alcohol and drug use, and underachievement in schools (*Ranasinghe, Ramesh et al. 2016*). However, these sensitive issues are rarely addressed in schools and within families. The failure to recognize and address mental health problems in children and adolescents is a serious public health issue with important consequences on the achievement of basic development goals in low- and middle-income countries (*Kieling, Baker-Henningham et al. 2011*). This becomes even more important in the context of Sustainable Development Goals (SDG). The SDG Target 3.4 under SDG goal 3 calls for reducing premature mortality by one third by 2030 from noncommunicable diseases through prevention and treatment of NCDs and promotion of mental health and well-being. Similarly the SDG Target 3.5 call for strengthening prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

Given the multi-directional linkages between mental health conditions and other health, educational, social and development problems, there may be high return on investments for addressing mental health issues of adolescents.

This publication provides evidence from nationally representative school health surveys, implemented as part of the Global School-based Student Health Survey Initiative, on prevalence of self-reported suicidal behaviours and other warning signs of mental health problems. It thereby aims to raise awareness of mental health problems among adolescents. It also aims to show associations of suicidal behaviours and mental health symptoms with potential protective behaviours (e.g. parental engagement) and risk factors (e.g. bullying) that may help inform public health interventions to address this important issue. Finally, it assesses the co-morbidity of substance use and mental health problems.

2 Data and methods

The data used in the report are from the latest round of the global school-based student health surveys (GSHS) (WHO, 2016) implemented by the Member States of the WHO South-East Asia Region. Almost all the Member States in the Region have implemented at least one round of GSHS in collaboration with the US Centers for Disease Control and Prevention (CDC) and the World Health Organization. All the countries that participated in the GSHS follow a standard protocol for sampling, surveying, and data management, ethics approval, and select survey questions from the same validated questionnaire bank. While the questions asked on key indicators are the largely the same across all countries, the exceptions are noted wherever applicable.

GSHS are cross-sectional surveys that collect data from adolescents enrolled in middle-to high- schools approximately 13–17 years old. However, the Indian survey covered only middle-school students approximately aged 13–15 years. GSHS measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth. A two-stage cluster sampling design is used to sample schools in the first stage and classes within the sampled schools in the second stage. Table below provides sample sizes included in GSHS in different countries.

Table: Sample size of students 13–17 years included in different GSHS in the South-East Asia Region

Garage (Company)				
Country (Survey year)	Total	Boys	Girls	Missing*
Bangladesh (2014)	2878	1179	1695	4
Bhutan (2016)	5809	2515	3255	39
India (2007) (13-15 years)**	6751	3724	2997	30
Indonesia (2015)	8899	4094	4798	7
Maldives (2014)	3039	1264	1738	37
Myanmar (2016)	2502	1156	1329	17
Nepal (2015)	5747	2668	3014	65
Sri Lanka (2016)	3173	1391	1766	16
Thailand (2015)	4990	2121	2856	13
Timor-Leste (2015)	2853	1228	1533	92

Notes: *Either the age or gender was missing for these observations and were excluded from the final analysis. **The data are only from schools under Central Board of Secondary Education.

The GSHS uses anonymous reporting by respondent students through self-administered questionnaires in a nationally representative sample of schools. Anonymous self-reported surveys may provide better results for reporting of behaviours or practices that are considered to be social taboos. The recall period for most of the questions varied from a week, 30 days (e.g. for substance use questions) to 12 months (e.g. for most mental health indicators), depending upon the indicator. There were no skip patterns used in the questionnaires, and all the students were expected to respond to all the questions.

The report presents point estimates along with 95% confidence intervals for key self-reported mental health (suicide attempts and suicidal ideation, and other signs of mental health problems) and substance use indicators as part of individual country profiles (Part II) and regional indicator data tables (Part III) providing a comparative snapshot. The extent of perceived parental engagement/connectedness and self-reported experience of bullying in school and their relationship with mental health indicators was also examined in terms of unadjusted odds ratio. In addition, data are presented on co-existence of substance use and mental health problems.

All of the counts reported in this report are unadjusted, but all of the proportions, odd ratios and statistical tests are based on weighted results (computed using *svy* command in STATA). Regional-level pooled estimates are also computed using country 13–17 year old populations as a proportion of the total 13–17 year old populations in the Region as the weighting factor. Two-sided Pearson's chi-squared tests were used to test for differences in the responses to key variables by sex. All of these analyses were conducted with STATA (version 11) and tested at a significance level of 90% and 95%.

Part-II of the report provides individual country profile for all the 10 member states showing the key indicator by sex and key relationships observed. The detailed tables included in country profile also provide 95% confidence intervals.

Part-III provides indicator-wise regional tables to provide a comparative perspective.

The findings presented in the subsequent "Results" section should be interpreted in the light of some limitations. The data are self-reported and not validated by direct observation or any other means. Second, since the survey is school-based, the data exclude non-school-going adolescents, which may account for a substantial proportion of the total adolescent population in many countries of the WHO South-East Asia Region. If mental health problems and substance use are higher among out-of-school adolescents, then the data presented may underestimate the prevalence of both mental health problems and substance use. In addition, the cross-sectional survey design does not allow for examination of causality. Finally, the cross-country comparisons of various indicators should be interpreted in the context of differential local social norms and other cultural aspects that may affect how adolescents may perceive and report different mental health issues.

3 Results

3.1 Burden of mental health problems

3.1.1 Suicidal ideation, plans and attempts

The data from GSHS show that suicidal behaviour, namely, suicidal ideation, plans, and attempts, is a common problem among adolescents in the WHO South-East Asia Region. Although this information was not collected in GSHS in India, among the remaining countries, the percentage of 13–17-year-old students who reported that they seriously considered attempting suicide in the last 12 months varied from 4.9% in Bangladesh to 13.7% in Nepal. The pooled 12-month prevalence of suicide ideation across nine countries (excluding India) was 6.8%. In general, female students reported higher rates of suicidal ideation than male students though the differences were statistically significant at 95% level in only three of the countries. Only in Timor-Leste and Thailand did male students report higher levels of suicidal ideation, though the differences were significant at a 90% level only in Timor-Leste (see Part III – Table 2).

The percentage of adolescents that reported attempting suicide at least once in the past 12 months varied from 3.9% in Indonesia to 13.3% in Thailand. The pooled 12-month prevalence of at least one suicidal attempt across 9 countries (excluding India) was 6.4%. While the prevalence of suicidal ideation was more among female students with some exceptions, the prevalence of reported suicidal attempt was higher among male students, with the exception of Bhutan, Myanmar, and Nepal where female students reported a higher rate of both suicidal ideation and attempts (see Part III – Table 2).

3.1.2 Loneliness and feeling anxious

The percentage of students who reported feeling lonely most of the time or always in the past 12 months varied from 6.7% in Indonesia and Nepal to 15.5% in Maldives. The pooled 12-month prevalence of loneliness across the 10 countries was 8.4%. Similar to suicide ideation, in most of countries female students were more likely to report feeling lonely than male students, except in Bangladesh, Thailand and Timor-Leste where male students reported higher prevalence of feeling lonely (though differences were not significant in Bangladesh and Sri Lanka and significant only at 90% level in the other two countries) (see Part III – Table 3).

The percentage of students who reported feeling so worried about something that they could not sleep at night varied from 3.9% in Myanmar to 15.1% in Maldives. The pooled 12-month prevalence of feeling anxious across the 10 countries was 6.9% (see Part III – Table 3).

A substantial proportion of students also reported having no close friends, ranging from 3.0% in Indonesia to 10.1% in India. The pooled 12-month prevalence of students reporting no close friends across the 10 countries was 8.6%. (see Part III – Table 3).

3.1.3 Substance use

GSHS examined the current use of smoking cigarettes as well as the use of any other form of tobacco (smoked and/or smokeless), alcohol and drug use. The cross-sectional association between substance use and mental health problems is well documented and hence the extent of substance use was examined as part of mental health problems among adolescents.

The results show substantial substance use among adolescents in the South-East Asia Region. The reported prevalence of current cigarette smoking, defined as smoking cigarettes on any of the days in the past 30 days, varied from 1.2% in India (for 13–15 year olds only) to 5.9% in Nepal to 20.1% in Timor-Leste and 24.6% in Bhutan. The pooled prevalence of current cigarette smoking across nine countries (excluding India which has estimates only for 13–15 year olds) was estimated at 9.7%. (see Part III – Table 4).

In addition to smoking cigarettes, the use of other tobacco products is also high. Inclusive of other tobacco products, the prevalence of current use of any tobacco product varied from 3.6% in India (among 13–15 year olds) to 27.1% in Timor-Leste to 29.3% in Bhutan. The pooled estimate across the nine countries (excluding India where data are available only for 13–15- year-olds) is 11.7% (see Part III – Table 4).

Similar to tobacco use, alcohol use also remains high but varies highly across countries ranging from 1.6% in Bangladesh to 23% in Thailand and 24.2% in Bhutan. For two countries (India and Maldives), the ever-use prevalence is reported. The pooled estimate across the 10 countries is 7.1% (see Part III – Table 5).

Current drug use also remains high especially in some countries such as Bhutan, Maldives, Thailand and Timor-Leste. GSHS in most countries primarily examined current marijuana use and ever use of amphetamines, though in some countries, the use of other drugs (e.g. cocaine, heroin, etc.) was also examined. Two of the countries (India and Myanmar) did not ask about any specific drug but use of any drug. This report presents data on current marijuana use (except in India and Myanmar where current use of any drug is reported) as a proxy indicator of drug use as these data were collected for most countries and varied from 1.0% in Indonesia to 12.0% in Bhutan. The pooled estimate across the 10 countries is 2.5% (see Part III – Table 6)

Male students were significantly more likely to indulge in substance use (cigarette smoking, tobacco use, alcohol use or marijuana) than female students almost across all the countries with few exceptions.

Multiple substance use (use of more than one substance) was also quite common, ranging from 1.3% in Bangladesh to 20.3% in Bhutan (see Part III – Table 6) and was significantly higher among male than female students.

3.2 Protective factors for mental health: Parental engagement

Previous literature has suggested that a healthy parental engagement protects adolescents from substance use and mental health problems.

A series of 3 to 12 questions with five response options (never, rarely, sometimes, most of the times, always) were asked in the GSHS survey to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A summative parental engagement index was created based on three common questions asked in all the countries in the Region. First, a binary variable is created with a value of 1 if respondent reported 'most of the times' or 'always' for a particular question, and value of 0, otherwise. In the second stage, a summative parental engagement index was created using the binary variables based on those 3 questions, which was categorized as 'low' if the score was 0, 'medium' if the score was 1, and 'high' if the score was 2–3.

A significant number of students reported low levels of parental engagement ranging from 15.0% students in Sri Lanka to almost one fifth of students in India and Myanmar to more than half of all students in Timor-Leste (see below Figure 1 and Part III – Table 9)

60% 55% 50% 41% 38% 37% 36% 40% 26% 30% 23% 22% 21% 20% 15% 10% 0% Bangladesh Bhutan India Indonesia Maldives Myanmar Nepal Sri Lanka Thailand Timor-Leste

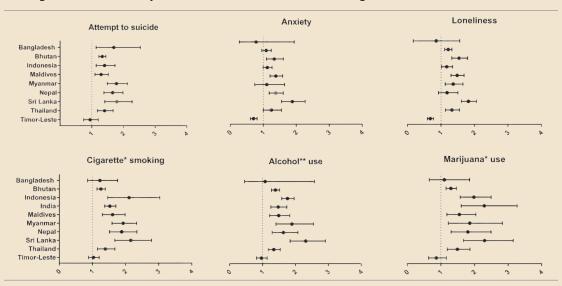
Figure 1: Percentage of students (13–17 year olds) reporting low level of parental engagement in the South-East Asia Region countries.

Source: Authors' calculations from various GSHS surveys.

3.2.1 Association between parental engagement and mental health problems and substance use

Not only was the proportion of student reporting low-level of parental engagement was very high across the countries, it was also found to significantly increase the risk of suicidal attempts, feeling lonely or feeling anxious as well substance use across all the countries in Region, with few exceptions (e.g. Timor-Leste) (see below figure 2 and Part III – Table 10 and 11). Stated otherwise, the higher level of parental engagement seems to be protective against mental health problems and substance use. The relationship was significant among both boys and girls.

Figure 2: Unadjusted odds ratios with 95% confidence interval showing association between parental engagement (dependent variable, reference group= high level of parental engagement) and selected mental health problems and substance use indicators among students 13–17 year olds in the South-East Asia Region.



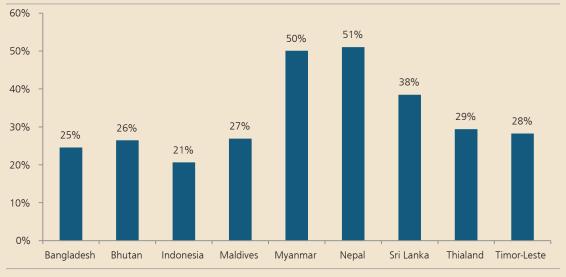
Source: Authors' calculations from Global School-based Student Health Survey 2014–2016 Notes: An odds ratio of 1 implies or 95% CI inclusive of 1 implies no association.

*In Myanmar, instead of current cigarette smoking, current tobacco smoking is used. For current alcohol use, in Maldives, it refers to 'ever' use of alcohol rather than current use. For Marijuana use, in India and Myanmar it refers to 'any drug use'.

3.3 Risk factors for mental health: Experience of being bullied

A significant proportion of students reported being bullied on one or more days in the past 30 days, ranging from almost one fifth (20.7%) students in Indonesia to almost half or more than half of all students in Myanmar and Nepal. In general, boys were more likely to report being bullied than girls, though differences were not statistically significant in many of the countries (e.g. Bhutan, Maldives, and Myanmar) (see below Figure 3 and Part III – Table 7)

Figure 3: Percentage of students (13–17 year olds) who reported being bullied on one or more days in past 30 days in the South-East Asia Region.



Source: Various Global School-based Student Survey 2014-2016

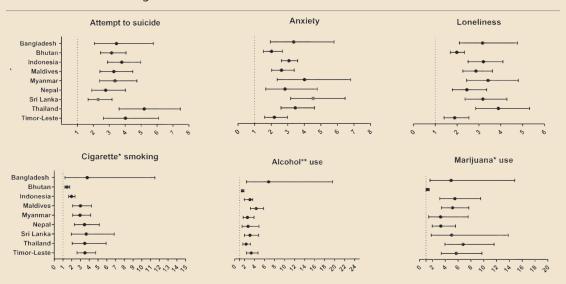
3.3.1 Association between being bullied and mental health problems and substance use

Not only is bullying highly prevalent in countries of the WHO South-East Asia Region as shown earlier, being bullied was associated with significantly higher reporting of mental health problems (attempting suicide, loneliness, or feeling worried) and substance use fairly consistently across all the countries in the Region (see Part III – Table 12 and 13).

For example, the number of students who reported being bullied were almost three times (e.g. in Bhutan and Nepal) to five times more likely to report attempting suicide in past 12 months than students who were not bullied. The relationship was significant among both boys and girls in most countries (see Part III – Table 12).

Similarly, students who reported being bullied in the past 30 days were almost two to four times more likely to smoke cigarettes, two to seven times more likely to use alcohol and two to seven times more likely to use marijuana. The relationship was significant among both boys and girls (see Figure 3 and Part-III – Table 13).

Figure 4: Unadjusted odds ratios with 95% confidence interval showing association between being bullied (dependent variable, reference group= no bullying) and selected mental health problems and substance use indicators among students 13–17 year olds in the South-East Asia Region.



Source: Authors' calculations from Global School-based Student Health Survey 2014–2016 Notes: An odds ratio of 1 implies or 95% CI inclusive of 1 implies no association.

*In Myanmar, instead of current cigarette smoking, current tobacco smoking is used. For current alcohol use, in Maldives, it refers to 'ever' use of alcohol rather than current use. For marijuana use, in India and Myanmar it refers to 'any drug use'.

3.4 Co-existence of mental health problems and substance use

Almost in all Member States, the presence of a mental health problem (suicide ideation, loneliness and anxiety used as dependent variable with reference group=no mental health problem) substantially increased the likelihood of cigarette smoking, alcohol use and drug (marijuana) use (see Part III – Table 14 to 16). The relationship was observed for both girls

and boys with few exceptions. However, based on results from these cross-sectional surveys, it is not possible to comment or direction of causality, as substance use may increase the likelihood of mental health problems, as well as mental health problems may increase the vulnerability of adolescents to include in substance use.

4 Conclusions and way forward

The results confirm the previous literature on high prevalence of mental health problems and substance use among adolescents in the WHO South-East Asia Region and emphasize the public health and development importance of the adolescent mental health.

Adolescent suicide behaviour seems to be a serious problem in all Member States of the Region. Suicide is the second most common cause of death among the 15–29 year age group. Almost one in eight adolescents in the age group 13–17 years of age reported attempting suicide one or more times in the past one year. Measures can be taken to prevent suicide by observing the factors significantly linked to suicidal behaviour. Steps can then be taken to identify adolescents who have serious suicidal ideation so that intervention can be taken to reduce the suicidal rate.

While almost all the countries in the Region with few exceptions legally restrict the supply (including sale) of tobacco and alcohol to people under a certain age ranging from 18 years to 21 years of age and completely ban the supply and sale of drugs such as marijuana and amphetamines, the results show their use remains high among 13–17 year olds. The evidence presented shows that almost one in 10 and almost one in 12 adolescents in the age-group 13–17 years of age smoked cigarettes and used alcohol, respectively. The actual prevalence may even be higher, as the current estimate is based only on school-going adolescents, and the non-school-going adolescents may smoke or drink alcohol more often. The Bhutan case is especially interesting, given the complete ban on domestic tobacco sales in the country. The reported drug use was also disturbingly high, especially in some countries such as Bhutan, Maldives, Thailand and Timor-Leste. The evidence shows the age of initiation of use of alcohol and tobacco is decreasing in SEA. This is of great concern from the public health point of view, as the lower the age of initiation, more the risk of developing addiction and dependence on these substances.

High substance use among adolescents despite underage laws and complete ban (e.g. for drugs) in most of the countries calls for more efficient implementation of strategies known to reduce consumption of these substances such as price and taxation, controls on availability, restrictions on advertising and promotions as well as exploration of alternative strategies to control substance use. Co-existence of substance use and mental health disorders calls for combined strategies and programmes to deal with both the issues and an acknowledgement of the fact that adolescents using substances may be highly vulnerable to developing mental health disorders and vice versa.

From the program managers and policy makers perspective, the results related to adverse relationship between bullying and mental health problems and the protective relationship with parental engagement suggest that schools and families may be the important entry points for programmes and interventions aiming to improve adolescent mental health problems.

The high level of bullying in the Region ranging from almost one fifth of students to almost half the students along with the strong adverse association between bullying and poor mental health and substance use in all the countries examined emphasizes the need to develop and implement strategies for reducing bullying among children and adolescents. The adverse association between being bullied and mental health problems and substance use seen in the WHO South-East Asia Region is consistent with the relationship seen in other Regions and countries such as China (*Cheng, Newman et al. 2010*), Ghana (*Owusu, Hart et al. 2011*), Caribbean countries (*Abdirahman, Bah et al. 2012*) and low- and middle-income countries (*Fleming and Jacobsen 2010*) as well, where such relationship has been investigated.

The results in this study are also consistent with previous literature that suggests that victims of bullying have increased stress and a reduced ability to concentrate and are at increased risk for substance abuse, aggressive behaviour and suicide attempts (Abdirahman, Bah et al. 2012, Wilson, Bovet et al. 2012).

Schools in most of the Member States place great emphasis on academic achievement, perhaps at the expense of the social climate of the school. It may be necessary to implement changes to the school climate to reduce the extent of bullying in schools and to create a positive school environment.

A higher level of parental engagement was found to be consistently protective against both mental health problems including suicidal behaviours as well as substance use. The relationship observed in the SEA Region is also consistent with similar relationship reported elsewhere outside the region (Cheng, Tao et al. 2009, Hasumi, Ahsan et al. 2012, Peltzer and Pengpid 2012).

Unfortunately, a troublingly high proportion of adolescents reported low level of parental engagement in the Region. The public policies, the youth programmes and schools should involve parents and emphasize the need for them to better engage with their adolescent children in meaningful ways.

Action is imperative to reduce the burden of mental health problems in future generations and to allow for the full development of vulnerable children and adolescents worldwide. More research may be required to further understand the dynamics of circumstances surrounding mental health issues and initiation of substance use. The results also warrant better experience sharing among member states in furthering the knowledge base of what works and what does not.

References

- 1. Cheng Y, Tao M, Riley L, Kann L, Ye L, Tian X, et al. Protective factors relating to decreased risks of adolescent suicidal behaviour. Child Care Health Dev. 2009 May;35(3):313-22.
- 2. Abdirahman HA1, Bah TT, Shrestha HL, Jacobsen KH. Bullying, mental health, and parental involvement among adolescents in the Caribbean. West Indian Med J. 2012 Aug;61(5):504-8.
- 3. Cheng Y, Newman IM, Qu M, Mbulo L, Chai Y, Chen Y, et al. Being bullied and psychosocial adjustment among middle school students in China. J Sch Health. 2010 Apr;80(4):193-9.
- 4. World Health Organization. Global School-based Student Health Survey (GSHS). Geneva, 2016. http://www.who.int/chp/gshs/en/ - accessed 15 March 2017.
- 5. Fleming LC, Jacobsen KH. Bullying among middle-school students in low and middle income countries. Health Promot Int. 2010 Mar;25(1):73-84.
- 6. Hasumi T, Ahsan F, Couper CM, Aguayo JL, Jacobsen KH. Parental involvement and mental well-being of Indian adolescents. Indian Pediatr. 2012 Nov;49(11):915-8.
- 7. Kieling C, Baker-Henningham H, Belfer M, Conti G, Ertem I, Omigbodun O, et al. Child and adolescent mental health worldwide: evidence for action. Lancet. 2011 Oct 22;378(9801):1515-25.
- 8. World Health Organization. Preventing suicide: a global imperative. Geneva, 2014.
- 9. Owusu A, Hart P, Oliver B, Kang M, et al. The association between bullying and psychological health among senior high school students in Ghana, West Africa. J Sch Health. 2011 May;81(5):231-8.
- 10. Peltzer K, Pengpid S. Suicidal ideation and associated factors among school-going adolescents in Thailand. Int J Environ Res Public Health. 2012 Feb;9(2):462-73.
- 11. Ranasinghe S, Ramesh S, Jacobsen KH. Hygiene and mental health among middle school students in India and 11 other countries. J Infect Public Health. 2016 Jul-Aug;9(4):429-35.
- 12. Wilson ML, Bovet P, Viswanathan B, Suris JC. Bullying among adolescents in a sub-Saharan middle-income setting. J Adolesc Health. 2012 Jul;51(1):96-8.
- 13. United Nations, Department of Economic and Social Affairs, Population Division. World population prospects: the 2015 revision. 2015

Part II Country Profiles

Bangladesh (2014)



Total population:^a

161.0 million

Adolescent^b (13-17 years) population: 10.2% of total population

Total:16.4 million Boys: 8.4 million Girls: 8.0 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 8.1

Boys: **5.5 Girls: 10.8**

Suicidal ideation

(considered attempting suicide)



Boys: 4%

Girls: 6%

Suicidal ideation with a plan

(made suicide plan)



Boys: 8% Girls: 7%

Attempted suicide

(one or more times)



Boys: 7% Girls: 6%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



Boys: 4% Girls: 5%

Loneliness

(felt lonely most of times or always)



Boys: 12% Girls: 9%

Had no close friends



Boys: 7%

Girls: 11%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





Girls: 2%

Current cigarette smokers

(on one or more days in past 30 days)



Boys: 11%

Girls: 2%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



Boys: 2%

Girls: <1%

Drunkenness

(drank so much alcohol to be really drunk)



Boys: 2% Girls: 0%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



Boys: 2%

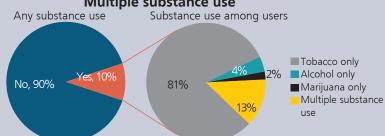
Girls: 0%

Current marijuana users



Boys: 2% Girls: 1%

Multiple substance use



Protective and risk factors for mental health and substance use

Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



47%

Boys: 43% Girls: 55%

Parents really knew what they were doing with their free time

(most of times or always)



43%

: 40% Girls: 49%

Parents checked if their homework was done

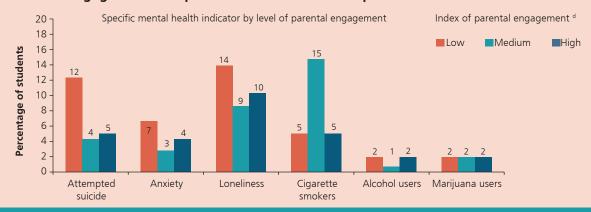
(most of times or always)



54%

Boys: 53% Girls: 56%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



56%

Boys: 56% Girls: 57%

Bullied by other students

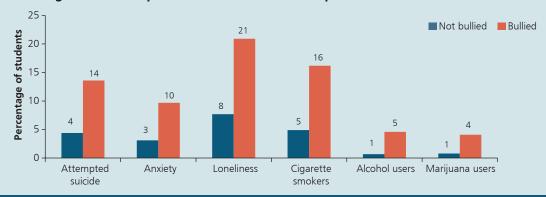
(one or more times in past 30 days)



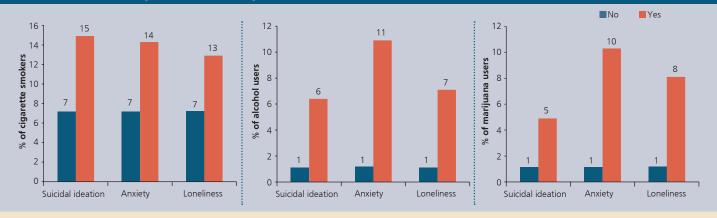
25%

Boys: 28% Girls: 18%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



A	Overall %	Boys %	Girls %	
Among students aged 13–17 years	(95% CI)	(95% CI)	(95% CI)	
Suicidal behaviour in past 12 months				
Attempted suicide one or more times	6.7 (5.2–8.7)	6.9 (5.0–9.5)	6.0 (4.2–8.6)	
Made a plan about how they would attempt suicide	7.5 (5.5–10.1)	7.5 (4.8–11.3)	7.3 (5.7–9.2)	
Seriously considered attempting suicide	4.9 (3.6–6.6)	4.4 (2.8–7.0)	5.8 (4.1–8.2)	
Warning signs of mental health problems in past 12 mg	onths			
Worried about something that they could not sleep at night most of times or always	4.7 (3.6–6.2)	4.4 (2.9–6.6)	5.1 (3.9–6.7)	
Did not have any close friends	8.2 (6.4–10.5)	6.7 (4.5–9.9)	11.4 (8.9–14.3)	
Felt lonely most of times or always	11.0 (8.7–13.8)	11.7 (8.8–15.4)	9.4 (7.1–12.4)	
Substance use on one or more days in past 30 days				
Current tobacco users (smoked and/or smokeless)	9.8 (6.3–15.0)	13.8* (8.4–22.0)	2.0 (1.2–3.6)	
Current cigarette smokers	7.7 (4.4–13.1)	11.0* (5.9–19.6)	1.5 (0.7–3.1)	
Current alcohol users	1.6 (0.8–3.2)	2.4* (1.2–4.7)	0.1 (0.0–0.5)	
Current marijuana users	1.7 (0.8–3.6)	2.2* (0.9–5.3)	0.5 (0.1–1.5)	
Ever drank so much alcohol that they were really drunk	1.3 (0.5–3.4)	2.0* (0.8–5.0)	0.0 (–)	
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	1.2 (0.5–3.0)	1.9* (0.8-4.4)	0.0 (-)	
Perceived parental engagement in past 30 days				
Parents or guardians understood their problems and worries most of times or always	47.2 (42.1–52.4)	43.3 (36.2–50.7)	54.8 (48.5–61.0)	
Parents or guardians really knew what they were doing with their free time most of times or always	42.9 (38.7–47.3)	39.9 (34.0–46.0)	48.7 (42.6–54.8)	
Parents or guardians checked to see if their homework was done most of times or always	54.0 (48.6–59.3)	52.9 (46.5–59.2)	56.2 49.8–62.4)	
Social relationships with peers in past 30 days				
Students in their school were kind and helpful most of times or always	56.1 (51.5–60.6)	55.6 (49.7–61.4)	57.0 (49.8–63.9)	
Bullied on one or more days	24.6 (21.0–28.5)	28.1 (23.5–33.3)	17.5 (14.2–21.5)	

	Odds ratio ^e			
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substai	nce use			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.69	1.65	1.88	
Anxiety	1.22 NS	1.25	1.33	
Loneliness	1.15 NS	1.06	1.42	
Current cigarette smokers	1.22 NS	1.12	1.58	
Current alcohol user	1.07 NS	1.02	#	
Current marijuana users	1.10 ^{NS}	1.15	1.10	
Bullying (ref=not bullied)				
Attempt to suicide	3.45	3.57	3.05	
Anxiety	3.36	3.21	3.61	
Loneliness	3.17	3.22	2.68	
Current cigarette smokers	3.77	3.25	4.51	
Current alcohol users	6.81	5.47	#	
Current marijuana users	4.91	4.87	#	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	2.22 NS	2.14	7.43	
Current alcohol users	7.20	8.79	#	
Current marijuana users	4.04 NS	5.93	#	
Anxiety (ref=no anxiety)				
Current cigarette smokers	2.08 NS	2.06	5.67	
Current alcohol users	10.27	11.35	29.79	
Current marijuana users	8.54	8.48	#	
Loneliness (ref=no loneliness)				
Current cigarette smokers	1.92	1.62	6.63	
Current alcohol users	7.89	8.04	#	
Current marijuana users	9.26	8.47	3.37	

Technical notes:

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

- (a) The data for both the total and 13-17 year old population are from World Population Prospects: The 2015 Revision, DVD Edition published by United Nations, Department of Economic and Social Affairs, Population Division (2015).
- (b) An adolescent is typically defined as a person in the age group 10 to 19 years of age. However, in this publication we report data for adolescent population 13 to 17 years of age only, as this was the age group included in GSHS surveys.
- (c) These are best estimates developed by WHO using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to WHO publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" accessible at http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
- (d) Index of parental engagement: A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS survey to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions which were common across the countries were used in this report. A binary variable for each of these 3 is created with a value of 1 if respondent reported 'most of the times' and 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using those 3 question, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2–3.
- (e) An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. All the odds ratios represented here are unadjusted or based on univariate logistic regression, not checking for any potential confounders..

^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Bhutan (2016)



Total population:^a

775 000

Adolescent^b (13-17 years) population: **9.4**% of total population

Boys: 37 000 Total:73 000 Girls: 36 000

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 15.7

Boys: 18.0 **Girls: 13.1**

Suicidal ideation

(considered attempting suicide)



Boys: 10% Girls: 13%

Suicidal ideation with a plan

(made suicide plan)



Boys: 11% Girls: 16%

Attempted suicide

(one or more times)



Boys: 10% Girls: 12%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



Boys: 6%

Girls: 9%

Loneliness

(felt lonely most of times or always)



Boys: 10% Girls: 14%

Had no close friends



Boys: 7%

Girls: 10%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





Girls: 18%

Current cigarette smokers

(on one or more days in past 30 days)



Boys: 38%

Girls: 13%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



24%

Boys: 33%

Girls: 16%

Drunkenness

(drank so much alcohol to be really drunk)



Boys: 33% **Girls: 15%**

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



Boys: 15%

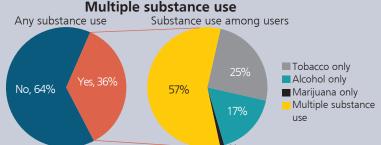
Girls: 6%

Current marijuana users



Boys: 21% Girls: 4%

Multiple substance use



Protective and risk factors for mental health and substance use

Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



43%

Boys: 40% Girls: 47%

Parents really knew what they were doing with their free time

(most of times or always)



37%

s: 36% Girls: 38%

Parents checked if their homework was done

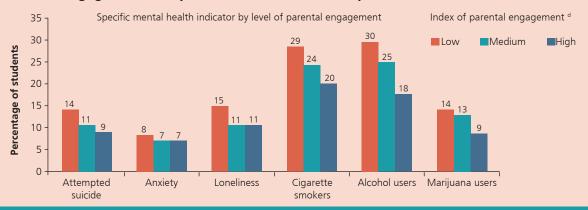
(most of times or always)



27%

Boys: 28% Girls: 26%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



42%

Boys: 41% Girls: 42%

Bullied by other students

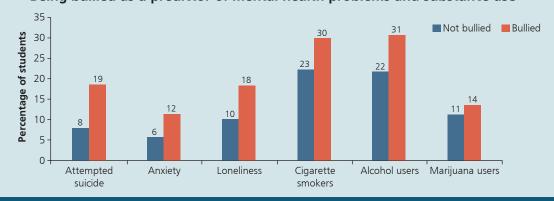
(one or more times in past 30 days)



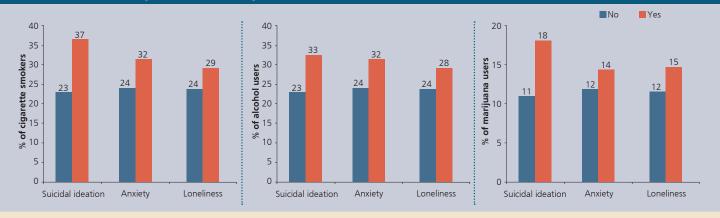
27%

Boys: 26% Girls: 26%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



A	Overall %	Boys %	Girls %	
Among students aged 13–17 years	(95% CI)	(95% CI)	(95% CI)	
Suicidal behaviour in past 12 months				
Attempted suicide one or more times	11.3 (10.0–12.7)	10.3 (8.8–12.0)	12.1 (10.5–13.7)	
Made a plan about how they would attempt suicide	13.7 (12.6–14.8)	11.2* (10.0–12.5)	15.8 (14.3–17.6)	
Seriously considered attempting suicide	11.6 (10.4–12.9)	9.8* (8.4–11.4)	13.1 (11.6–14.8)	
Warning signs of mental health problems in past 12 mo	nths			
Worried about something that they could not sleep at night most of times or always	7.6 (6.8–8.6)	6.2* (5.7–7.3)	8.8 (7.7–10.0)	
Did not have any close friends	8.7 (7.7–9.8)	7.4 (6.3–8.7)	9.8 (8.6–11.1)	
Felt lonely most of times or always	12.4 (11.1–13.8)	10.0* (8.6–11.6)	14.4 (12.7–16.3)	
Substance use on one or more days in past 30 days				
Current tobacco users (smoked and/or smokeless)	29.4 (26.8–32.0)	42.9* (39.6–46.2)	17.6 (15.2–20.2)	
Current cigarette smokers	24.7 (22.4–27.1)	38.0* (35.0–41.1)	13.1 (10.9–15.6)	
Current alcohol users	24.2 (22.0–26.5)	33.4* (30.4–36.6)	16.1 (13.9–18.6)	
Current marijuana users	12.0 (10.7–13.4)	21.0* (18.7–23.6)	4.1 (3.2–5.3)	
Ever drank so much alcohol that they were really drunk	26.9 (23.5–30.7)	33.3* (29.0–37.8)	15.0 (11.3–19.6)	
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	10.1 (9.2–11.1)	14.5* (13.2–15.9)	6.1 (5.2–7.3)	
Perceived parental engagement in past 30 days				
Parents or guardians understood their problems and worries most of times or always	43.3 (41.1–45.6)	39.8* (37.5–42.1)	46.6 (43.8–49.3)	
Parents or guardians really knew what they were doing with their free time most of times or always	37.2 (34.1–40.3)	35.8 (32.2–39.6)	38.4 (35.3–41.6)	
Parents or guardians checked to see if their homework was done most of times or always	26.7 (24.8–28.8)	27.5 (25.3–29.9)	26.1 (23.9–28.4)	
Social relationships with peers in past 30 days				
Students in their school were kind and helpful most of times or always	41.8 (39.6–44.0)	41.4 (38.8–44.1)	42.2 (39.8–44.7)	
Bullied on one or more days	26.5 (23.1–30.1)	26.3 (22.8–30.2)	26.3 (22.7–30.2)	

	Odds ratio ^e			
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance us	е			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.33	1.31	1.36	
Anxiety	1.09 NS	0.90 NS	1.24	
Loneliness	1.21	1.16 NS	1.27	
Current cigarette smokers	1.25	1.20	1.31	
Current alcohol user	1.38	1.35	1.40	
Current marijuana users	1.29	1.25	1.33	
Bullying (ref=not bullied)				
Attempt to suicide	2.69	3.14	2.37	
Anxiety	2.02	1.76	2.21	
Loneliness	1.99	1.74	2.17	
Current cigarette smokers	1.47	1.41	1.66	
Current alcohol users	1.59	1.42	1.90	
Current marijuana users	1.24	1.12	1.78	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	1.93	1.94	2.95	
Current alcohol users	1.69	1.41	2.45	
Current marijuana users	1.77	1.86	3.07	
Anxiety (ref=no anxiety)				
Current cigarette smokers	1.45	1.32 NS	2.20	
Current alcohol users	1.52	1.54	1.85	
Current marijuana users	1.24 NS	1.08 NS	2.62	
Loneliness (ref=no loneliness)				
Current cigarette smokers	1.310	1.40	1.78	
Current alcohol users	1.276	1.32 NS	1.50	
Current marijuana users	1.30 ^{NS}	1.42 NS	1.99	

Technical notes:

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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- (b) An adolescent is typically defined as a person in the age group 10 to 19 years of age. However, in this publication we report data for adolescent population 13 to 17 years of age only, as this was the age group included in GSHS surveys.
- (c) These are best estimates developed by WHO using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to WHO publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" accessible at http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
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- (e) An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. All the odds ratios represented here are unadjusted or based on univariate logistic regression, not checking for any potential confounders.

^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

India (2007)



Total population:^a

1311.1 million

Adolescent^b (13-15 years) population: **5.8**% of total population

Total: 75.5 million Boys: 39.8 million Girls: 35.7 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 35.5

Boys: **34.9**

Girls: 36.1

Depressed

(felt so sad/hopeless almost every day for 2 weeks or more in a row)



25%

Boys: 25% Girls: 24%

Distracted

(hard time staying focused on their homework and usual work most of times or always)



11%

Boys: 12% Girls: 10%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



8%

Boys: 7% Girls: 9%

Loneliness

(felt lonely most of times or always)



8%

Boys: 7% Girls: 10%

Had no close friends



10%

Boys: 10% Girls: 10%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





4%

Boys: 5%

Girls: 2%

Current cigarette smokers

(on one or more days in past 30 days)



1%

Boys: 2%

Girls: <1%

Ever used alchohol



8%

Boys: 9%

Girls: 7%

Drug users

(used inhalants, fluid, charas, ganja one or more times in past 12 months)

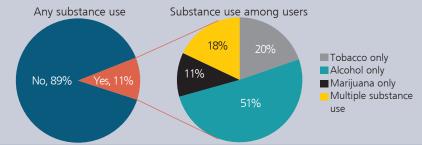


3%

Boys: 3%

Girls: 3%

Multiple substance use



Protective and risk factors for mental health and substance use

Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



62%

Boys: 60%

Girls: 64%

Parents really knew what they were doing with their free time

(most of times or always)



57%

Girls: 61%

Parents checked if their homework was done

(most of times or always)

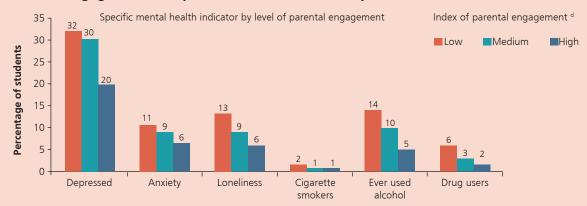


17%

Girls: 47%

Boys: 47%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



42%

Boys: 39% Girls: 46%

Bullied

(felt disturbed due to the comments from their peers, family members, or teachers)

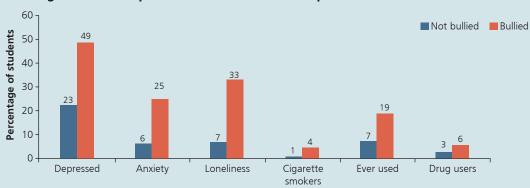


7%

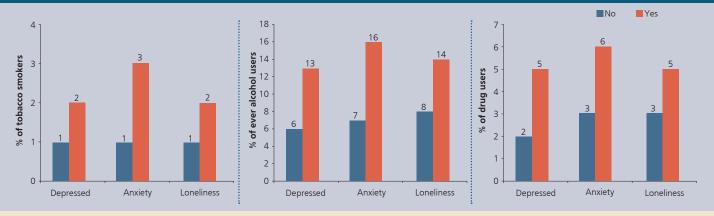
Boys: 7%

Girls: 7%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students aged 13–15 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)
Warning signs of mental health problems in past 12 mg	onths		
Worried about something that they could not sleep at night most of times or always	7.8 (7.0–8.5)	7.2 (6.1–8.3)	8.5 (7.1–9.8)
Did not have any close friends	10.1 (9.2–11.1)	10.2 (9.1–11.4)	10.0 (8.6–11.3)
Felt lonely most of times or always	8.4 (7.4–9.4)	7.4 (6.3–8.5)	9.8 (8.1–11.5)
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities	24.6 (22.3–27.0)	25.1 (22.3–27.9)	24.1 (20.8–27.3)
Had a hard time staying focused on their homework or other things they had to do most of the time or always	11.1 (8.8–13.4)	11.5 (9.4–13.6)	10.3 (7.3–13.4)
Substance use on one or more days in past 30 days			
Current tobacco users (smoked and/or smokeless)	3.6 (2.9–4.4)	4.5 (3.4–5.6)	2.4 (1.5–3.3)
Current cigarette smokers	1.2 (0.8–1.6)	1.9 (1.2–2.6)	0.2 (0.0–0.4)
Ever alcohol users	8.0 (6.5–9.7)	8.9 (7.0–11.2)	6.7 (5.3–8.6)
Used drugs, such as inhaling any fluid, using Charas, or Ganja, one or more times during the past 12 months	2.8 (2.1–3.5)	2.7 (1.9–3.4)	3.0 (1.9–4.0)
Perceived parental engagement in past 30 days			
Parents or guardians understood their problems and worries most of times or always	61.6 (59.3–63.9)	60.3 (58.0–62.5)	63.5 (60.0–66.8)
Parents or guardians really knew what they were doing with their free time most of times or always	57.0 (54.6–59.3)	54.1 (51.5–56.7)	61.0 (57.6–64.2)
Parents or guardians checked to see if their homework was done most of times or always	46.7 (43.0–50.5)	46.6 (43.0–50.1)	46.9 (42.3–51.6)
Social relationships with peers in past 30 days			
Students in their school were kind and helpful most of times or always	41.6 (38.1–45.2)	38.6 (35.3–42.0)	45.8 (40.7–50.9)
Felt disturbed due to the comments from their peers, family members or teachers in past 12 months	7.1 (6.1–8.1)	7.4 (6.1–8.6)	6.6 (5.4–7.8)

		Odds ratio ^e		
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance	use			
Perceived parental engagement (ref=high engagement)				
Depressed	1.42	1.31	1.61	
Anxiety	1.33	1.27	1.42	
Loneliness	1.54	1.44	1.67	
Current cigarette smokers	2.10	2.31	0.61	
Ever alcohol user	1.75	1.99	1.44	
Drug users (in past 12 months)	1.98	2.71	1.33	
Bullying (ref=not bullied)				
Depressed	3.27	3.12	3.49	
Anxiety	4.95	4.83	5.08	
Loneliness	6.93	7.19	7.14	
Current cigarette smokers	4.42	4.69	1.76	
Ever alcohol user	2.98	3.68	2.00	
Drug users (in past 12 months)	2.20	1.56	2.83	
Mental health as predictor of substance use				
Depressed (ref=no depression)				
Current cigarette smokers	2.81	2.77	3.18	
Ever alcohol user	2.22	2.07	2.51	
Drug users (in past 12 months)	2.68	3.09	2.31	
Anxiety (ref=no anxiety)				
Current cigarette smokers	2.75	2.89	4.93	
Ever alcohol user	2.31	2.75	1.82	
Drug users (in past 12 months)	2.39	2.46	2.38	
Loneliness (ref=no loneliness)				
Current cigarette smokers	2.25	2.32	4.16	
Ever alcohol user	2.08	2.28	1.95	
Drug users (in past 12 months)	2.12	1.95	2.34	

Technical notes:

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

- (a) The data for both the total and 13-15 year old population are from World Population Prospects: The 2015 Revision, DVD Edition published by United Nations, Department of Economic and Social Affairs, Population Division (2015).
- (b) An adolescent is typically defined as a person in the age group 10 to 19 years of age. However, in India we report data for adolescent population 13 to 15 years of age only, as this was the age group included in GSHS surveys.
- (c) These are best estimates developed by WHO using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to WHO publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" accessible at http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
- (d) Index of parental engagement: A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS survey to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions which were common across the countries were used in this report. A binary variable for each of these 3 is created with a value of 1 if respondent reported 'most of the times' and 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using those 3 question, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2–3.
- (e) An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. All the odds ratios represented here are unadjusted or based on univariate logistic regression, not checking for any potential confounders.

^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Indonesia (2015)

Total population:^a

257.6 million

Adolescent^b (13-17 years) population: **9.1**% of total population

Total: 23.4 million Boys: 12.0 million Girls: 11.4 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 3.6

Boys: 3.6 Girls: 3.6

Suicidal ideation

(considered attempting suicide)



5%

Boys: 4%

Girls: 6%

Suicidal ideation with a plan

(made suicide plan)



6%

Boys: 5% Girls: 6%

Attempted suicide

(one or more times)



4%

Boys: 4%

Girls: 3%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



5%

Boys: 5%

Girls: 5%

Loneliness

(felt lonely most of times or always)



7%

Boys: 6% Girls: 7%

Had no close friends



3%

Boys: 4%

Girls: 2%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





14%

Bovs: 25%

Girls: 2%

Current cigarette smokers

(on one or more days in past 30 days)



13%

Boys: 24%

Girls: 2%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



4%

Boys: 7%

Girls: 2%

Drunkenness

(drank so much alcohol to be really drunk)



4%

Boys: 7% Girls: 1%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



3%

Boys: 5%

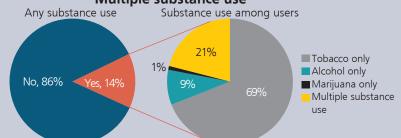
Girls: 1%

Current marijuana users



1%

Boys: 2% Girls: 1%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



34%

Boys: 32% Girls: 37%

Parents really knew what they were doing with their free time

(most of times or always)



40%

6 Girls: 49%

Parents checked if homework was done

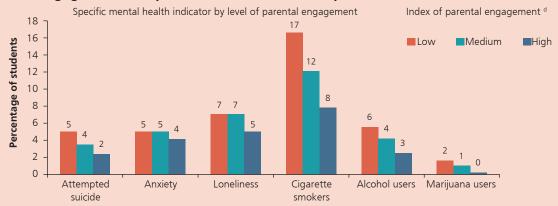
(most of times or always)



33%

oys: 34% Girls: 32%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



40%

Boys: 34% Girls: 45%

Bullied by other students

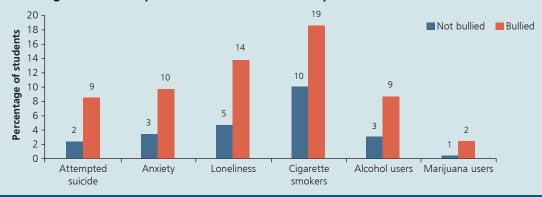
(one or more times in past 30 days)



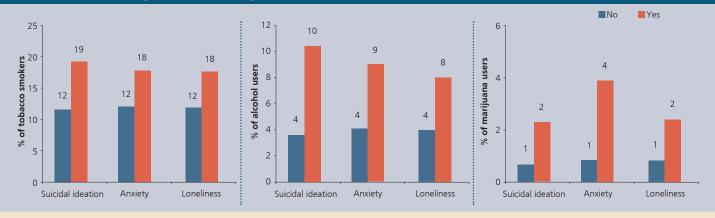
21%

Boys: 24% Girls: 18%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students aged 13–17 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)
Suicidal behaviour in past 12 months			
Attempted suicide one or more times	3.9 (3.2–4.7)	4.3 (3.3–5.5)	3.4 (2.9–4.1)
Made a plan about how they would attempt suicide	5.6 (5.0–6.3)	5.0 (4.2–6.0)	6.1 (5.4–7.0)
Seriously considered attempting suicide	5.4 (4.7–6.3)	4.4 (3.5–5.5)	6.4 (5.6–7.4)
Warning signs of mental health problems in past 12 mg	onths		
Worried about something that they could not sleep at night most of times or always	4.8 (4.1–5.5)	5.1 (4.1–6.2)	4.5 (3.8–5.2)
Did not have any close friends	3.0 (2.4–3.7)	3.8* (3.0–4.8)	2.2 (1.7–2.9)
Felt lonely most of times or always	6.7 (6.1–7.3)	6.0 (5.3–6.9)	7.3 (6.4–8.3)
Substance use on one or more days in past 30 days			
Current tobacco users (smoked and/or smokeless)	13.6 (11.7–15.6)	25.1* (21.5–29.0)	2.3 (1.6–3.2)
Current cigarette smokers	12.5 (10.7–14.4)	23.7* (20.3–27.4)	1.5 (1.0–2.3)
Current alcohol users	4.4 (3.5–5.4)	7.2* (5.9–8.9)	1.6 (0.9–2.6)
Current marijuana users	1.0 (0.7–1.5)	1.6* (1.1–2.3)	0.5 (0.2–1.0)
Ever drank so much alcohol that they were really drunk	3.7 (3.0–4.5)	6.5* (5.3–8.0)	0.9 (0.6–1.3)
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	2.7 (2.1–3.3)	4.7* (3.6–6.0)	0.7 (0.5–1.1)
Perceived parental engagement in past 30 days			
Parents or guardians understood their problems and worries most of times or always	34.1 (32.8–35.5)	31.5 (29.9–33.1)	36.8 (35.0–38.6)
Parents or guardians really knew what they were doing with their free time most of times or always	40.2 (37.7–42.8)	31.0* (28.7–33.4)	49.3 (46.3–52.2)
Parents or guardians checked to see if their homework was done most of times or always	33.0 (30.2–35.8)	33.6 (30.8–36.5)	32.4 (28.9–36.0)
Social relationships with peers in past 30 days			
Students in their school were kind and helpful most of times or always	39.9 (37.6–42.2)	34.4* (31.7–37.2)	45.2 (42.6–47.9)
Bullied on one or more days	20.6 (18.7–22.7)	23.7* (21.4–26.2)	17.7 (15.5–20.1)

		Odds ratio ^e		
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance	e use			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.40	1.36	1.42	
Anxiety	1.12	1.06 NS	1.17	
Loneliness	1.17	1.03 NS	1.33	
Current cigarette smokers	1.52	1.34	1.72	
Current alcohol user	1.47	1.37	1.24 NS	
Current marijuana users	2.29	1.80	3.94	
Bullying (ref=not bullied)				
Attempt to suicide	3.79	4.07	3.31	
Anxiety	3.07	3.11	3.05	
Loneliness	3.20	3.35	3.24	
Current cigarette smokers	1.98	1.65	3.58	
Current alcohol users	3.08	2.66	3.27	
Current marijuana users	5.47	3.77	12.56	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	1.80	2.07	8.89	
Current alcohol users	3.10	4.12	2.95	
Current marijuana users	3.43	3.77	4.65	
Anxiety (ref=no anxiety)				
Current cigarette smokers	1.58	1.47	3.00	
Current alcohol users	2.32	2.40	1.75 ^{NS}	
Current marijuana users	4.72	5.29	2.79 NS	
Loneliness (ref=no loneliness)				
Current cigarette smokers	1.57	1.97	1.73 ^{NS}	
Current alcohol users	2.06	2.53	1.70 ^{NS}	
Current marijuana users	2.84	3.23	2.61 NS	

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Maldives (2014)



Total population:^a

364 000

Adolescent^b (13-17 years) population: **8.5**% of total population

Total: 31 000 Boys: 16 000 Girls: 15 000

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012) c: 4.1

Boys: **5.9**

Girls: 2.2

Suicidal ideation

(considered attempting suicide)



13%

Boys: 12% Girls: 14%

Suicidal ideation with a plan

(made suicide plan)



Boys: 17%

19%

Girls: 20%

Attempted suicide

(one or more times)



13%

Boys: 14% Girls: 11%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



15%

Boys: 12% Girls: 18%

Loneliness

(felt lonely most of times or always)



16%

Boys: 12% Girls: 19%

Had no close friends



9%

Boys: 9% Girls: 8%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





12%

Bovs: 18%

Girls: 7%

Current cigarette smokers

(on one or more days in past 30 days)



10%

Boys: 15%

Girls: 5%

Ever alcohol users



7%

Boys: 10%

Girls: 4%

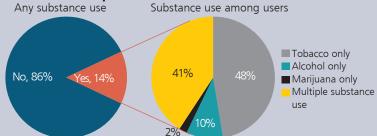
Current marijuana users



4%

Boys: 7%

Girls: 2%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



33%

Boys: 33% Girls: 34%

Parents really knew what they were doing with their free time

(most of times or always)



47%

ys: 46% Girls: 49%

Parents checked if their homework was done

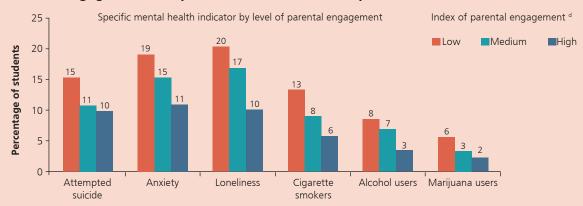
(most of times or always)



29%

Boys: 32% Girls: 26%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



59%

Boys: 55% Girls: 63%

Bullied by other students

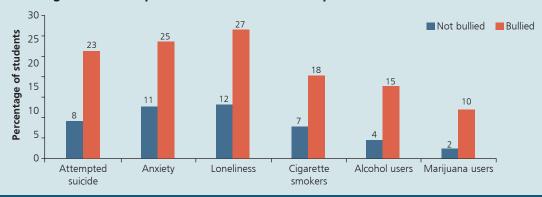
(one or more times in past 30 days)



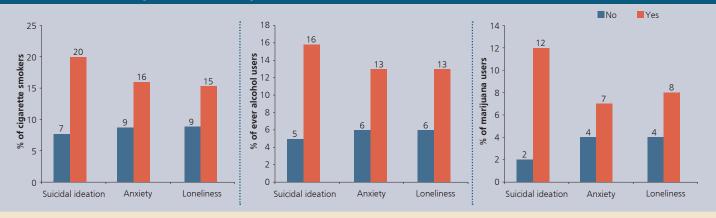
27%

Boys: 27% Girls: 26%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictor of substance use



Among students aged 13–17 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)	
Suicidal behaviour in past 12 months				
Attempted suicide one or more times	12.7 (11.1–14.3)	14.3 (12.0–17.0)	10.6 (9.2–12.2)	
Made a plan about how they would attempt suicide	18.6 (16.5–20.7)	16.6 (13.9–19.7)	19.9 (17.4–22.6)	
Seriously considered attempting suicide	13.1 (11.6–14.6)	11.6 (9.5–14.0)	14.1 (12.2–16.3)	
Warning signs of mental health problems in past 12 mg	onths			
Worried about something that they could not sleep at night most of times or always	15.1 (13.5–16.8)	11.9 (10.0–14.0)	18.4 (15.8–21.3)	
Did not have any close friends	8.8 (7.7–10.1)	9.4 (7.4–11.8)	8.0 (6.8–9.5)	
Felt lonely most of times or always	15.7 (14.2–17.4)	12.4 (10.2–15.1)	18.7 (16.9–20.7)	
Substance use on one or more days in past 30 days				
Current tobacco users (smoked and/or smokeless)	12.3 (10.7–14.1)	17.5 (14.8–20.6)	6.8 (5.5–8.3)	
Current cigarette smokers	9.9 (8.4–11.7)	14.5 (11.8–17.6)	5.2 (4.0-6.6)	
Ever alcohol users	7.1 (5.7–8.9)	10.1 (7.7–13.2)	3.9 (2.9–5.3)	
Current marijuana users	4.4 (3.5–5.6)	6.9 (5.2–9.0)	1.8 (1.2–2.6)	
Perceived parental engagement in past 30 days				
Parents or guardians understood their problems and worries most of times or always	33.2 (31.5–34.9	33.3 (30.3–36.3)	33.6 (30.9–36.4)	
Parents or guardians really knew what they were doing with their free time most of times or always	47.3 (44.6–50.0)	45.9 (41.7–50.0)	49.2 (45.7–52.8)	
Parents or guardians checked to see if their homework was done most of times or always	29.0 (26.5–31.6)	32.3 (28.9–36.0)	25.6 (23.0–28.4)	
Social relationships with peers in past 30 days				
Students in their school were kind and helpful most of times or always	58.5 (56.2–60.8)	55.1 (51.1–59.1)	62.6 (60.1–64.9)	
Bullied on one or more days	26.9 (25.0–28.8)	27.2 (24.6–30.0)	26.1 (23.8–28.5)	j
				•

		Odds ratio	e	
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance u	ise			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.29	1.21	1.39	
Anxiety	1.38	1.29	1.46	
Loneliness	1.48	1.47	1.49	
Current cigarette smokers	1.60	1.64	1.67	
Ever alcohol user	1.49	1.55	1.39	
Current marijuana users	1.54	1.73	1.26	
Bullying (ref=not bullied)				
Attempt to suicide	3.29	3.45	3.04	
Anxiety	2.62	2.94	2.55	
Loneliness	2.86	2.32	3.56	
Current cigarette smokers	2.99	2.64	4.30	
Ever alcohol users	4.29	4.10	4.84	
Current marijuana users	5.13	4.88	7.71	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	3.23	2.92	6.08	
Ever alcohol users	4.05	4.47	5.32	
Current marijuana users	6.03	7.58	5.28	
Anxiety (ref=no anxiety)				
Current cigarette smokers	2.00	2.32	2.84	
Ever alcohol users	2.50	3.03	3.54	
Current marijuana users	2.03	2.44	3.29	
Loneliness (ref=no loneliness)				
Current cigarette smokers	1.92	2.05	2.84	
Ever alcohol users	2.43	2.65	3.19	
Current marijuana users	2.35	3.21	1.85	

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- (a) The data for both the total and 13-17 year old population are from World Population Prospects: The 2015 Revision, DVD Edition published by United Nations, Department of Economic and Social Affairs, Population Division (2015).
- (b) An adolescent is typically defined as a person in the age group 10 to 19 years of age. However, in this publication we report data for adolescent population 13 to 17 years of age only, as this was the age group included in GSHS surveys.
- (c) These are best estimates developed by WHO using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to WHO publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" accessible at http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
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- (e) An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. All the odds ratios represented here are unadjusted or based on univariate logistic regression, not checking for any potential confounders.

^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Myanmar (2016)



Total population:^a

53.9 million

Adolescent^b (13-17 years) population: 9.6% of total population

Total: 5.1 million Boys: 2.6 million Girls: 2.6 million

Suicidal behaviour in past 12 months

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 15.7

Boys: 19.8 Girls: 11.8

Suicidal ideation

(considered attempting suicide)



9%

Boys: 8%

Girls: 11%

Suicidal ideation with a plan

(made a suicide plan)



7%

Boys: 5% Girls: 9%

Attempted suicide

(one or more times)



9%

Boys: 7% Girls: 11%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



4%

Boys: 4%

Girls: 4%

Lonely

(felt lonely most of time or always)



9%

Boys: 7% Girls: 10%

Depressed

(felt so sad/hopeless for 2 weeks or more in a row)



27%

Boys: 26% Girls: 29%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless – on one or more days in past 30 days)



20/

10%

ovs: 18%

Girls: 2%

Current tobacco smokers

(smoked any form of tobacco product on at least 1 day in past 30 days)



7%

Boys: 15% Girls: 1%

Current smokeless tobacco users

(any smokeless tobacco product on at least 1 day in past 30 days)



9%

Boys: 16%

Girls: 2%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



5%

Boys: 8%

Girls: 1%

Drunkenness

(drank so much alcohol to be really drunk)



4%

Boys: 7% Girls: 1%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



2%

Bovs: 3%

Girls: 1%

Ever used drug

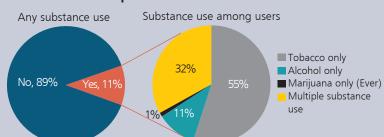
(marijuana, amphetamines, cocaine or inhalants)



1%

Boys: 2%

Girls: <1%



Perceived parental engagement

Parents understood their problems and worries

(most times or always)



52%

Boys: 48%

Girls: 57%

Parents really knew what they were doing with their free time

(most times or always)



57%

Bovs: 51%

Girls: 63%

Parents checked if homework was done

(most times or always)

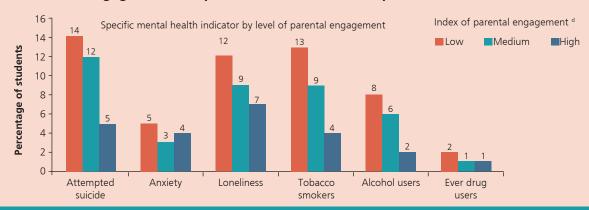


47%

Boys: 46%

Girls: 48%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



38%

Boys: 34% Girls: 42%

Bullying by other students

(one or more times in past 30 days)

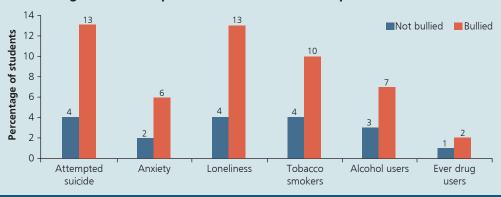


50%

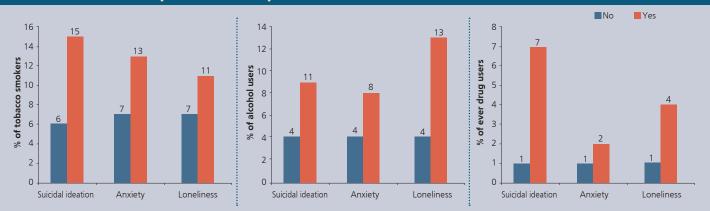
Boys: 51%

Girls: 49%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students aged 13–17 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)	
Suicidal behaviour in past 12 months				
Attempted suicide one or more times	8.8 (7.0–11.1)	6.9 (5.1–9.2)	10.6 (8.3–13.6)	
Made a plan about how they would attempt suicide	6.8 (5.2–8.9)	4.9 (3.0–8.0)	8.6 (6.5–11.2)	
Seriously considered attempting suicide	9.4 (7.5–11.8)	7.9 (5.7–10.8)	10.9 (8.8–13.4)	
Warning signs of mental health problems in past 12 mg	onths			
worried about something that they could not sleep at night most of the time or always	3.9 (3.1–4.8)	3.7 (2.9–4.6)	4.0 (2.9–5.6)	
Felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing their usual activities	27.2 (24.8–29.8)	25.8 (23.2–28.6)	28.5 (25.0–32.1)	
Did not have close friends	3.7 (2.9–4.7)	3.5 (2.4–4.9)	4.0 (2.7–5.7)	
Felt lonely most of the time or always	8.7 (7.5–10.1)	7.2 (5.5–9.4)	10.1 (8.1–12.5)	
Substance use on one or more days in past 30 days)				
Current tobacco users (smoked and/or smokeless)	9.8 (8.1–11.9)	18.3 (14.9–22.1)	2.4 (1.2–4.5)	
Current tobacco smokers	7.2 (5.8–8.9)	14.9* (11.8–18.5)	0.5 (0.2–1.1)	
Current smokeless tobacco users	8.5 (6.8–10.6)	15.7* (12.6–19.3)	2.4 (1.2–4.6)	
Currently alcohol users	4.7 (3.4–6.5)	8.3* (6.3–10.8)	1.4 (0.6–3.2)	
Ever used drugs (marijuana, amphetamines, cocaine or inhalants)	1.1 (0.7–1.8)	2.1* (1.3–3.5)	0.2 (0.1–0.9)	
Ever drank so much alcohol that they were really drunk	3.7 (2.8–5.0)	7.1* (5.3–9.4)	0.8 (0.3–1.9)	
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	1.8 (1.4–2.4)	3.1* (2.3–4.2)	0.5 (0.2–1.0)	
Perceived parental engagement in past 30 days				
Parents or guardians understood their problems and worries most of times or always	52.3 (49.4–55.3)	47.6* (43.4–51.8)	56.6 (52.9–60.2)	
Parents or guardians really knew what they were doing with their free time most of times or always	56.9 (53.7–59.9)	50.5* (46.8–54.2)	62.9 (59.2–66.4)	
Parents or guardians checked to see if their homework was done most of times or always	47.3 (43.4–51.1)	46.3 (41.2–51.5)	48.2 (43.3–53.1)	
Social relationships with peers in past 30 days				
Students in their school were kind and helpful most of times or always	37.9 (34.7–41.2)	33.8 (29.6–38.2)	41.7 (38.0–45.4)	
Bullied on one or more days	50.1 (46.2–54.0)	51.0 (46.3–55.7)	49.1 (44.5–53.7)	
				ĺ

		Odd ratio ^e		
	Overall	Boys	Girls	
Predictors of suicide, mental health problems and substance use	е			
Parental engagement (ref=high engagement)				
Attempt to suicide	1.77	1.63	2.00	
Anxiety	1.10 ^{NS}	1.33 ^{NS}	0.96 ^{NS}	
Loneliness	1.36	1.77 ^{NS}	1.59	
Depressed	1.47	1.29	1.72	
Current tobacco smokers	1.92	1.74	3.37	
Current alcohol users	1.89	1.70	2.14	
Ever drug users	1.85	1.70	1.44 ^{NS}	
Bullying (ref=not bullied)				
Attempt to suicide	3.36	3.38	3.44	
Anxiety	4.00	4.31	3.84	
Loneliness	3.42	1.82	5.91	
Depressed	3.11 ^{NS}	2.80 ^{NS}	3.48 ^{NS}	
Current tobacco smokers	2.94	3.03	8.99 ^{NS}	
Current alcohol users	2.58	2.33	3.54	
Ever drug users	3.28	2.73	#	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current tobacco smokers	2.50	3.83	1.00	
Current alcohol users	3.62	3.39	11.61	
Ever drug users	4.59	6.52	2.30	
Anxiety (ref=no anxiety)				
Current tobacco smokers	2.04	2.26	4.06 ^{NS}	
Current alcohol users	2.69	3.43	0.89 ^{NS}	
Ever drug users	9.26	8.54	17.59 ^{NS}	
Loneliness (ref=no loneliness)				
Current tobacco smokers	1.69	2.45	1.63 ^{NS}	
Current alcohol users	1.90	1.66 ^{NS}	5.63	
Ever drug users	1.97	2.93	#	

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Nepal (2015)



Total population:^a

28.5 million

Adolescent^b (13-17 years) population: 11.8% of total population

Total: 3.4 million Boys: 1.7 million Girls: 1.6 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 25.8

Boys: 26.2 Girls: 25.4

Suicidal ideation

(considered attempting suicide)



14%

Boys: 13% Girls: 14%

Suicidal ideation with a plan

(made suicide plan)



14%

Boys: 13% Girls: 15%

Attempted suicide

(one or more times)



10%

Boys: 9% Girls: 11%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



5%

Boys: 4% Girls: 4%

Loneliness

(felt lonely most of times or always)



7%

Boys: 7% Girls: 7%

Had no close friends



4%

Boys: 4%

Girls: 5%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





8%

Bovs: 11% Girls: 5%

Current cigarette smokers

(on one or more days in past 30 days)



6%

Boys: 8%

Girls: 3%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



5%

Boys: 7% Girls: 4%

Drunkenness

(drank so much alcohol to be really drunk)



5%

Boys: 7% Girls: 3%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



3%

Boys: 4%

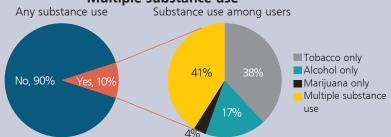
Girls: 2%

Current marijuana users



3%

Boys: 4% Girls: 2%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



54%

Boys: 53% Girls: 55%

Parents really knew what they were doing with their free time

(most of times or always)



51%

s: 48% Girls: 54%

Parents checked if homework was done

(most of times or always)

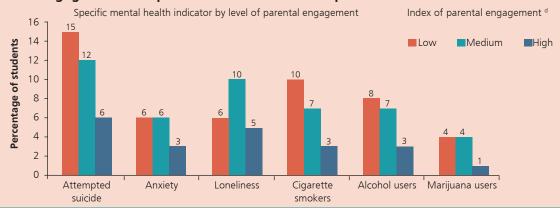


50%

Girls: 52%

Boys: 49%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



54%

Boys: 53% Girls: 56%

Bullied by other students

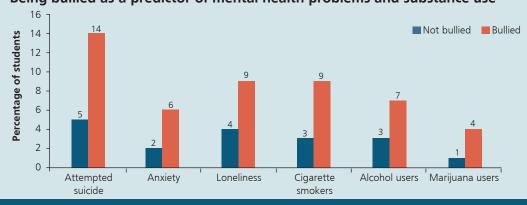
(one or more times in past 30 days)



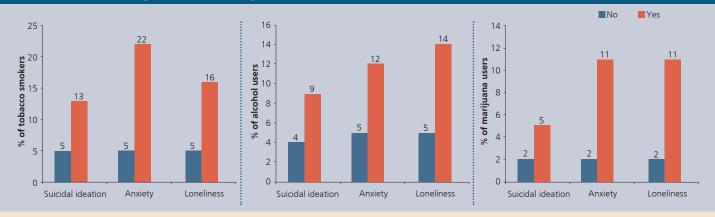
51%

Boys: 56% Girls: 46%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students aged 13–17 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)
Suicidal behaviour in past 12 months			
Attempted suicide one or more times	10.0 (7.7–12.8)	8.9 (6.5–11.9)	10.7 (8.2–13.7)
Made a plan about how they would attempt suicide	14.0 (11.9–16.3)	12.6 (10.3–15.2)	14.8 (12.2–17.8)
Seriously considered attempting suicide	13.7 (11.2–16.6)	12.7 (9.8–16.3)	13.9 (11.4–16.9)
Warning signs of mental health problems in past 12 mg	onths		
Worried about something that they could not sleep at night most of times or always	4.6 (3.7–5.7)	4.4 (3.1–6.0)	4.4 (3.1–6.2)
Did not have any close friends	4.4 (3.2–6.1)	3.7 (2.6–5.2)	5.0 (3.6–6.9)
Felt lonely most of times or always	6.7 (5.5–8.2)	6.5 (5.3–7.8)	6.7 (5.1–8.7)
Substance use on one or more days in past 30 days			
Current tobacco users (smoked and/or smokeless)	8.1 (6.4–10.2)	11.0* (8.7–13.8)	5.0 (3.7–6.9)
Current cigarette smokers	5.9 (4.6–7.7)	8.4* (6.4–11.0)	3.3 (2.2–5.1)
Current alcohol users	5.2 (4.0–6.9)	6.7* (5.4–8.4)	3.6 (2.4–5.4)
Current marijuana users	2.7 (1.9–3.9)	3.7* (2.7–5.0)	1.6 (1.0–2.7)
Ever drank so much alcohol that they were really drunk	5.1 (3.5–7.2)	7.1* (5.4–9.2)	2.8 (1.4–5.4)
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	2.7 (1.5–4.8)	3.5 (2.2–5.5)	1.9 (0.8–4.5)
Perceived parental engagement in past 30 days			
Parents or guardians understood their problems and worries most of times or always	53.5 (48.8–58.1)	52.6 (48.0–57.2)	54.7 (49.1–60.2)
Parents or guardians really knew what they were doing with their free time most of times or always	50.7 (46.1–55.3)	47.7 (43.3–52.2)	54.2 (48.6–59.6)
Parents or guardians checked to see if their homework was done most of times or always	50.4 (46.2–54.5)	48.5 (44.1–52.9)	52.3 (46.8–57.7)
Social relationships with peers in past 30 days			
Students in their school were kind and helpful most of times or always	54.0 (50.1–57.8)	52.8 (49.0–56.6)	55.6 (50.9–60.2)
Bullied on one or more days	51.0 (47.4–54.6)	56.1 (51.5–60.6)	46.0 (42.5–49.5)

		Odds ratio ^e		
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and subs	tance use			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.65	1.56	1.77	
Anxiety	1.37	1.41	1.39	
Loneliness	1.18 NS	1.18 NS	1.20 NS	
Current cigarette smokers	1.88	1.74	2.39	
Current alcohol user	1.63	1.49	1.94	
Current marijuana users	1.80	1.80	1.91 NS	
Bullying (ref=not bullied)				
Attempt to suicide	2.80	2.93	2.77	
Anxiety	2.83	2.50	2.71	
Loneliness	2.44	2.50	2.37	
Current cigarette smokers	3.45	2.74	3.85	
Current alcohol users	2.71	2.14	3.12 ^{NS}	
Current marijuana users	3.31	5.42	1.44 NS	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	3.15	3.43	3.32	
Current alcohol users	2.07	1.37 NS	3.70	
Current marijuana users	2.48	1.83 ^{NS}	4.31	
Anxiety (ref=no anxiety)				
Current cigarette smokers	5.03	5.36	4.64	
Current alcohol users	2.65	3.39	1.30	
Current marijuana users	5.48	6.07	3.88	
Loneliness (ref=no loneliness)				
Current cigarette smokers	3.45	2.78	4.56	
Current alcohol users	3.41	3.00	3.86	
Current marijuana users	5.39	4.64	6.25	

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Sri Lanka (2016)



Total population:^a

20.7 million

Adolescent^b (13-17 years) population: **7.9**% of total population

Total: 1.6 million Boys: 0.8 million Girls: 0.8 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 23.7

Boys: **36.8** Girls: **10.7**

Suicidal ideation

(considered attempting suicide)



9%

Boys: 10%

Girls: 9%

Suicidal ideation with a plan

(made suicide plan)



7%

Boys: 6% Girls: 7%

Attempted suicide

(one or more times)



7%

Boys: 7% Girls: 7%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



5%

Boys: 4% Girls: 5%

Loneliness

(felt lonely most of times or always)



9%

Boys: 7% Girls: 10%

Had no close friends



6%

Boys: 5% Girls: 6%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





9%

Boys: 16%

Girls: 3%

Current cigarette smokers

(smoked cigarettes on at least 1 day in past 30 days)



4%

Boys: 6%

Girls: 1%

Current smokeless tobacco users

(any smokeless tobacco product on at least 1 day in past 30 days)



2%

Boys: 4%

Girls: <1%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days



3%

Boys: 6%

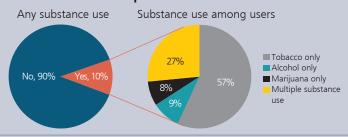
Girls: 1%

Current marijuana users



3%

Boys: 4% Girls: 1%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



63%

Boys: 57% Girls: 68%

Parents really knew what they were doing with their free time

(most of times or always)



69%

3% Girls: 75%

Parents checked if their homework was done

(most of times or always)

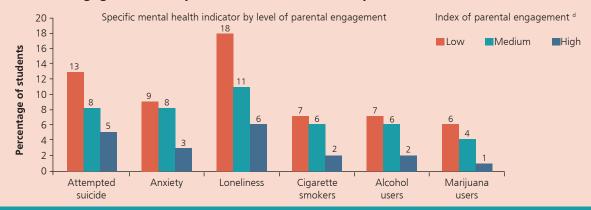


66%

Boys: 61%

Girls: 70%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



51%

Boys: 48% Girls: 55%

Bullied by other students

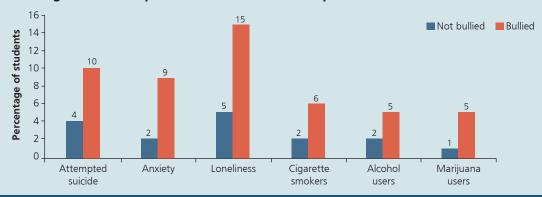
(one or more times in past 30 days)



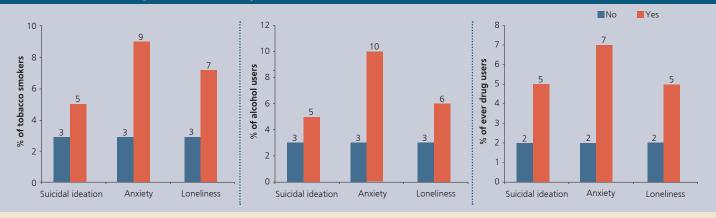
39%

Boys: 49% Girls: 29%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictor of substance use



		Overall %	Boys %	Girls %	
Among students aged 13–1	/ years	(95% CI)	(95% CI)	(95% CI)	
Suicidal behaviour in past 12	months				
Attempted suicide one or mor	e times	6.7 (5.8–7.9)	6.7 (5.3–8.4)	6.7 (5.3–8.4)	
Made a plan about how they	would attempt suicide	6.5 (5.5–7.6)	6.0 (4.8–7.6)	6.8 (5.5–8.3)	
Seriously considered attempting	g suicide	9.4 (7.9–11.2)	9.6 (7.5–12.2)	9.1 (7.4–11.1)	
Warning signs of mental he	alth problems in past 12 mo	onths			
Worried about something that night most of times or always	they could not sleep at	4.6 (3.5–6.1)	4.2 (2.7–6.6)	4.9 (3.8–6.3)	
Did not have any close friends		5.6 (4.5–7.0)	5.0 (3.5–7.0)	6.1 (5.1–7.3)	
Felt lonely most of times or alv	vays	8.5 (7.4–9.8)	7.3 (6.0–9.0)	9.5 (7.8–11.5)	
Substance use on one or more	re days in past 30 days				
Current tobacco users (smoked	d and smokeless)	9.2 (7.3–11.5)	15.6 (12.0–19.8)	3.0 (2.3–4.0)	
Current cigarette smokers		3.5 (2.4–4.9)	6.2 (4.2–9.2)	0.7 (0.4–1.3)	
Current smokeless tobacco use	ers	2.3 (1.5–3.6)	4.3 (2.7–6.9)	0.4 (0.2–0.9)	
Current alcohol users		3.2 (2.5–4.1)	5.5 (3.9–7.6)	1.0 (0.6–1.7)	
Current marijuana users		2.7 (1.7–4.2)	4.2 (2.3–7.4)	1.1 (0.7–1.8)	
Perceived parental engagen	nent in past 30 days				
Parents or guardians understo worries most of times or alway	•	62.6 (59.8–65.2)	57.3 (53.8–60.7)	67.7 (65.2–70.1)	
Parents or guardians really kne with their free time most of tir		69.2 (65.7–72.5)	63.4 (59.3–67.4)	74.8 (71.3–78.1)	
Parents or guardians checked was done most of times or alv		65.7 (60.8–70.4)	61.4 (55.8–66.8)	70.0 (64.1–75.3)	
Social relationships with pe	ers in past 30 days				
Students in their school were l times or always	cind and helpful most of	51.2 (47.6–54.8)	47.6 (43.9–51.2)	54.6 (49.5–59.6)	
Bullied on one or more days		38.5 (33.0–44.2)	48.6 (43.0–54.3)	28.7 (23.2–35.0)	

	Odds ratio ^e				
	Overall	Boys	Girls		
Predictors of suicide, mental health problems, and substance	use				
Perceived parental engagement (ref=high engagement)					
Attempt to suicide	1.79	1.51	2.10		
Anxiety	1.87	1.59	2.23		
Loneliness	1.81	1.19	2.74		
Current cigarette smokers	2.15	1.94	1.93		
Current alcohol user	2.31	2.06	2.14		
Current marijuana users	2.29	1.88	3.16		
Bullying (ref=not bullied)					
Attempt to suicide	2.30	1.56	3.37		
Anxiety	4.53	3.20	6.56		
Loneliness	3.17	2.46	4.40		
Current cigarette smokers	3.65	1.97	#		
Current alcohol users	3.07	1.79	6.88		
Current marijuana users	5.01	2.50	26.73		
Mental health as predictor of substance use					
Suicidal ideation (ref=no suicidal ideation)					
Current cigarette smokers	2.04 ^{NS}	1.69	4.72		
Current alcohol users	2.16	2.30	1.71		
Current marijuana users	2.93	2.03	6.22		
Anxiety (ref=no anxiety)					
Current cigarette smokers	3.07	2.42	9.78		
Current alcohol users	3.74	3.62	4.55		
Current marijuana users	3.12	2.67	4.26		
Loneliness (ref=no loneliness)					
Current cigarette smokers	2.20	2.29	1.67		
Current alcohol users	2.25	2.06	3.51		
Current marijuana users	2.49	2.15	2.74		

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

- (a) The data for both the total and 13-17 year old population are from World Population Prospects: The 2015 Revision, DVD Edition published by United Nations, Department of Economic and Social Affairs, Population Division (2015).
- (b) An adolescent is typically defined as a person in the age group 10 to 19 years of age. However, in this publication we report data for adolescent population 13 to 17 years of age only, as this was the age group included in GSHS surveys.
- (c) These are best estimates developed by WHO using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to WHO publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" accessible at http://www.who.int/mental_health/suicideprevention/world_report_2014/en/
- (d) Index of parental engagement: A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS survey to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions which were common across the countries were used in this report. A binary variable for each of these 3 is created with a value of 1 if respondent reported 'most of the times' and 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using those 3 question, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2–3.
- (e) An odds ratio (OR) is a measure of association between an exposure and an outcome. The OR represents the odds that an outcome will occur given a particular exposure, compared to the odds of the outcome occurring in the absence of that exposure. All the odds ratios represented here are unadjusted or based on univariate logistic regression, not checking for any potential confounders.
- * Differences between male and female students are statistically significant at 95% level.
- # Missing standard errors because of stratum with single sampling unit.
- NS Not significant at 95% level.

Thailand (2015)

Total population:^a

68.0 million

Adolescent^b (13-17 years) population: 6.4% of total population

Total: 4.3 million Boys: 2.2 million Girls: 2.1 million

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 8.1

Boys: **5.5** Girls: **10.8**

Suicidal ideation

(considered attempting suicide)



13%

Boys: 13% Girls: 12%

Suicidal ideation with a plan

(made suicide plan)



15%

Boys: 15% Girls: 14%

Attempted suicide

(one or more times)



13%

Boys: 15% Girls: 12%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



9%

Boys: 9% Girls: 9%

Loneliness

(felt lonely most of times or always)



10%

Boys: 11% Girls: 9%

Had no close friends



6%

Boys: 8% Girls: 5%

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





14%

Bovs: 22%

Girls: 7%

Current cigarette smokers

(on one or more days in past 30 days)



10%

Boys: 17%

Girls: 5%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



23%

Boys: 27%

Girls: 19%

Drunkenness

(drank so much alcohol to be really drunk)



25%

Boys: 27% Girls: 23%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



11%

Boys: 14%

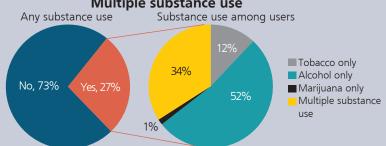
Girls: 8%

Current marijuana users



5%

Boys: 8% Girls: 3%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



28%

Boys: 24% Girls: 32%

Parents really knew what they were doing with their free time

(most of times or always)



42%

ys: 35% Girls: 49%

Parents checked if their homework was done

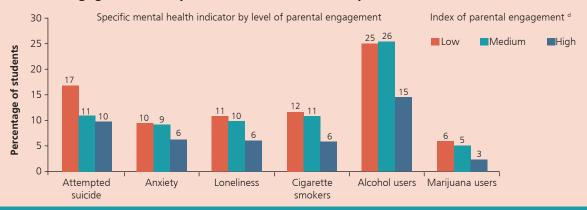
(most of times or always)



28%

Boys: 28% Girls: 27%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



40%

Boys: 32% Girls: 47%

Bullied by other students

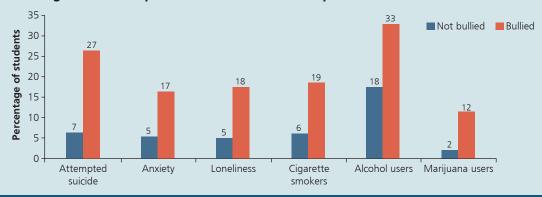
(one or more times in past 30 days)



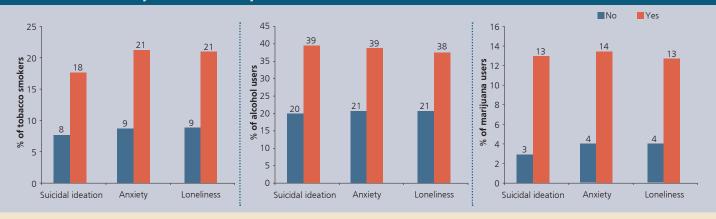
30%

Boys: 35% Girls: 24%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students aged 13–17 years	Overall % (95% CI)	Boys % (95% CI)	Girls % (95% CI)	
Suicidal behaviour in past 12 months				
Attempted suicide one or more times	13.3 (10.6–16.7)	14.8 (10.8–19.9)	12.0 (10.2–14.0)	
Made a plan about how they would attempt suicide	14.5 (12.2–17.2)	15.1 (12.3–18.3)	14.0 (11.7–16.7)	
Seriously considered attempting suicide	12.5 (10.7–14.4)	13.0 (10.7–15.8)	11.9 (10.4–13.7)	
Warning signs of mental health problems in past 12 mg	onths			
Worried about something that they could not sleep at night most of times or always	9.2 (7.5–11.3)	9.0 (6.7–12.1)	9.4 (7.4–12.0)	
Did not have any close friends	6.4 (5.5–7.5)	7.5 (5.6–9.9)	5.4 (4.1–7.2)	
Felt lonely most of times or always	9.8 (8.4–11.3)	10.6 (8.8–12.7)	8.9 (7.6–10.5)	
Substance use on one or more days in past 30 days				
Current tobacco users (smoked and smokeless)	14.1 (10.6–18.5)	21.5* (16.1–28.1)	7.4 (5.2–10.4)	
Current cigarette smokers	10.4 (7.9–13.5)	16.6* (12.4–21.9)	4.8 (3.6–6.5)	
Current alcohol users	23.0 (20.2–26.0)	27.2* (23.2–31.5)	19.2 (16.4–22.5)	
Current marijuana users	5.4 (3.9–7.4)	8.4* (6.2–11.4)	2.6 (1.5–4.6)	
Ever drank so much alcohol that they were really drunk	24.9 (22.2–27.8)	26.6 (23.2–30.4)	23.3 (20.5–26.4)	
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	10.7 (9.0–12.8)	13.5* (10.9–16.7)	8.2 (6.6–10.2)	
Perceived parental engagement in past 30 days				
Parents or guardians understood their problems and worries most of times or always	28.1 (25.4–30.9)	23.8 (20.5–27.6)	31.9 (29.0–34.9)	
Parents or guardians really knew what they were doing with their free time most of times or always	42.3 (39.5–45.1)	35.0 (31.8–38.3)	48.7 (45.2–52.2)	
Parents or guardians checked to see if their homework was done most of times or always	27.5 (24.8–30.5)	28.1 (24.9–31.6)	27.1 (24.1–30.4)	
Social relationships with peers in past 30 days				
Students in their school were kind and helpful most of times or always	40.0 (36.6–43.6)	32.4* (28.6–36.4)	46.8 (42.5–51.2)	
Bullied on one or more days	29.5 (26.0–33.3)	35.2* (29.7–41.1)	24.3 (21.6–27.2)	

47

		Odds ratio	e	
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance us	е			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	1.40	1.32	1.45	
Anxiety	1.24	0.99	1.49	
Loneliness	1.32	1.16	1.45	
Current cigarette smokers	1.39	1.29	1.37	
Current alcohol user	1.34	1.18	1.47	
Current marijuana users	1.49	1.33	1.54	
Bullying (ref=not bullied)				
Attempt to suicide	5.20	6.17	4.39	
Anxiety	3.45	3.22	3.91	
Loneliness	3.89	4.08	3.60	
Current cigarette smokers	3.48	2.67	4.77	
Current alcohol users	2.30	1.78	2.80	
Current marijuana users	6.77	5.09	9.23	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	2.58	2.27	3.35	
Current alcohol users	2.66	2.04	3.42	
Current marijuana users	4.83	3.91	8.22	
Anxiety (ref=no anxiety)				
Current cigarette smokers	2.82	2.36	4.69	
Current alcohol users	2.40	1.37	3.99	
Current marijuana users	3.69	3.18	6.09	
Loneliness (ref=no loneliness)				
Current cigarette smokers	2.76	2.26	4.06	
Current alcohol users	2.26	1.44	3.56	
Current marijuana users	3.36	2.76	4.19	

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Timor-Leste (2015)



Total population:^a

1185000

Adolescent^b (13-17 years) population: **11.6**% of total population

Total: 137000 Boys: 70 000 Girls: 67 000

Suicidal behaviour in past 12 months:

Estimated suicide rates per 100 000 (aged 15–29 years, 2012): 9.0

Boys: 10.7 **Girls: 7.3**

Suicidal ideation

(considered attempting suicide)



Boys: 10% Girls: 8%

Suicidal ideation with a plan

(made suicide plan)



Boys: 11%

Girls: 8%

Attempted suicide

(one or more times)



10%

Boys: 10% Girls: 8%

Warning signs of mental health problems in past 12 months

Anxiety

(could not sleep because of being worried)



Girls: 11% Boys: 12%

Loneliness

(felt lonely most of times or always)



Boys: 16% Girls: 13%

Had no close friends



Girls: 5% **Boys: 4%**

Substance use

Current tobacco users

(used any tobacco product – smoked and/or smokeless on one or more days in past 30 days)





Girls: 16%

Current cigarette smokers

(on one or more days in past 30 days)



Boys: 35%

Girls: 7%

Current alcohol users

(had at least one alcoholic drink on one or more days in past 30 days)



16%

Boys: 22% Girls: 9%

Drunkenness

(drank so much alcohol to be really drunk)



Boys: 16% Girls: 5%

Problem from drinking

(got into trouble with family/friends, missed school, or got into fights as a result of drinking alcohol)



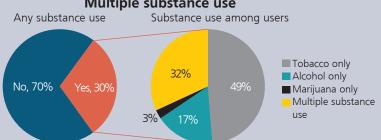
Boys: 13%

Girls: 5%

Current marijuana users



Boys: 6% Girls: 3%



Perceived parental engagement

Parents understood their problems and worries

(most of times or always)



11%

Boys: 11% Girls: 12%

Parents really knew what they were doing with their free time

(most of times or always)



24%

ys: 22% Girls: 25%

Parents checked if their homework was done

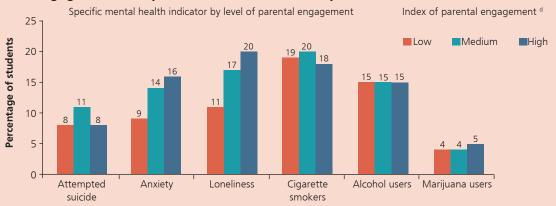
(most of times or always)



30%

oys: 29% Girls: 30%

Parental engagement as a predictor of mental health problems and substance use



School experience

Perceived other students to be kind and helpful

(most of times or always)



28%

Boys: 25% Girls: 30%

Bullied by other students

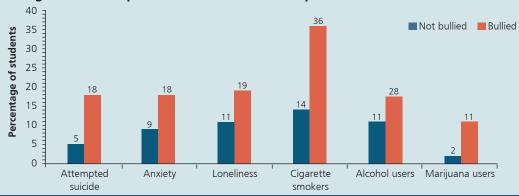
(one or more times in past 30 days)



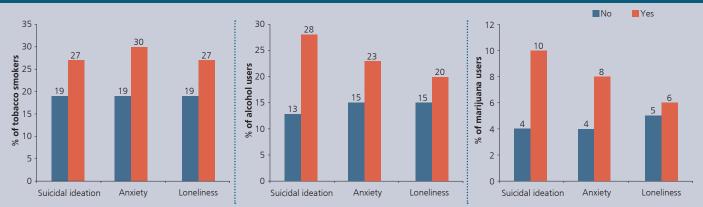
28%

Boys: 33% Girls: 23%

Being bullied as a predictor of mental health problems and substance use



Mental health problems as predictors of substance use



Among students and 42, 47 years	Overall %	Boys %	Girls %
Among students aged 13–17 years	(95% CI)	(95% CI)	(95% CI)
Suicidal behaviour in past 12 months			
Attempted suicide one or more times	9.5 (7.4–12.1)	9.6 (7.2–12.6)	8.0 (6.0–10.5)
Made a plan about how they would attempt suicide	9.6 (8.0–11.6)	10.5 (8.7–12.6)	7.9 (6.1–10.1)
Seriously considered attempting suicide	9.3 (8.0–10.9)	9.9 (8.1–11.9)	7.7 (6.4–9.3)
Warning signs of mental health problems in past 12 mg	onths		
Worried about something that they could not sleep at night most of times or always	11.8 (9.9–14.0)	12.1 (9.4–15.5)	10.9 (8.8–13.4)
Did not have any close friends	4.4 (3.6–5.4)	3.7 (2.7–5.1)	4.9 (3.8–6.3)
Felt lonely most of times or always	14.2 (11.8–16.9)	15.5 (12.3–19.4)	12.6 (10.3–15.2)
Substance use on one or more days in past 30 days			
Current tobacco users (smoked and/or smokeless)	27.6 (25.4–29.9)	39.6* (34.8–44.6)	15.6 (14.1–17.3)
Current cigarette smokers	20.2 (17.9–22.7)	34.9* (29.9–40.1)	6.5 (5.6–7.5)
Current alcohol users	15.7 (13.1–18.6)	21.5* (16.7–27.3)	9.3 (7.5–11.4)
Current marijuana users	5.0 (3.7–6.6)	6.0 (4.2–8.4)	3.4 (2.4–4.7)
Ever drank so much alcohol that they were really drunk	10.5 (8.5–12.9)	16.4* (12.4–21.5)	4.8 (3.9–5.9)
Ever got into trouble with family or friends, missed school, or got into fights as a result of drinking alcohol	9.1 (7.4–11.0)	13.2* (10.8–16.1)	4.6 (3.5–6.1)
Perceived parental engagement in past 30 days			
Parents or guardians understood their problems and worries most of times or always	11.4 (9.7–13.4)	11.2 (9.3–13.5)	11.6 (9.3–14.3)
Parents or guardians really knew what they were doing with their free time most of times or always	23.5 (20.6–26.8)	22.0 (18.5–26.0)	25.0 (21.1–29.4)
Parents or guardians checked to see if their homework was done most of times or always	29.5 (26.8–32.2)	28.7 (25.9–31.5)	30.1 (27.1–33.4)
Social relationships with peers in past 30 days			
Students in their school were kind and helpful most of times or always	27.7 (24.6–30.9)	25.4 (22.6–28.3)	29.9 (26.1–34.1)
Bullied on one or more days	28.3 (25.5–31.2)	33.4* (29.3–37.8)	22.6 (20.1–25.2)

	Odds ratio ^e			
	Overall	Boys	Girls	
Predictors of suicide, mental health problems, and substance u	ıse			
Perceived parental engagement (ref=high engagement)				
Attempt to suicide	0.94 NS	0.90 ^{NS}	0.97 ^{NS}	
Anxiety	0.70	0.73	0.66	
Loneliness	0.67	0.81 NS	0.53	
Current cigarette smokers	1.02 NS	1.02 NS	0.96 ^{NS}	
Current alcohol user	0.96 ^{NS}	1.01 NS	0.87 NS	
Current marijuana users	0.86 NS	0.74 NS	1.12 NS	
Bullying (ref=not bullied)				
Attempt to suicide	4.02	3.08	5.24	
Anxiety	2.19	1.83	2.62	
Loneliness	1.89	1.44	2.21	
Current cigarette smokers	3.51	2.56	7.37	
Current alcohol users	3.34	2.54	3.94	
Current marijuana users	5.73	4.93	6.12	
Mental health as predictor of substance use				
Suicidal ideation (ref=no suicidal ideation)				
Current cigarette smokers	1.63	1.42	2.40	
Current alcohol users	2.45	1.95	2.69	
Current marijuana users	2.76	2.15	3.77	
Anxiety (ref=no anxiety)				
Current cigarette smokers	1.82	1.45 NS	3.00	
Current alcohol users	1.75	1.64	1.75	
Current marijuana users	1.87	1.58 NS	2.47	
Loneliness (ref=no loneliness)				
Current cigarette smokers	1.60	1.30 NS	2.32	
Current alcohol users	1.50	1.14 NS	1.75	
Current marijuana users	1.41 NS	1.08 NS	2.20 ^{NS}	

Data source: The data reported in this profile comes from latest round of Global School-based Student Health Survey (GSHS). For more information on survey, please visit www.who.int/chp/gshs

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^{*} Differences between male and female students are statistically significant at 95% level.

[#] Missing standard errors because of stratum with single sampling unit.

NS – Not significant at 95% level.

Part III Regional Indicator Data Tables

Table 1: Estimated suicide rates per 100 000 population aged 15–29 years in the WHO South East-Asia Region (2012)

Country	Total	Male	Female	Male/Female ratio
Bangladesh	8.1	5.5	10.8	0.51
Bhutan	15.7	18.0	13.1	1.37
India	35.5	34.9	36.1	0.97
Indonesia	3.6	3.6	3.6	1.00
Maldives	4.1	5.9	2.2	2.68
Myanmar	15.7	19.8	11.8	1.68
Nepal	25.8	26.2	25.4	1.03
Sri Lanka	23.7	36.8	10.7	3.44
Thailand	8.7	13.9	3.6	3.86
Timor-Leste	9.0	10.7	7.3	1.47

Notes:

^a These are the estimates developed by WHO for the year 2012 using standard categories, definitions and methods to ensure cross-country comparability, and may not be the same as official national estimates. The estimates are rounded to the appropriate number of significant figures. For further information on these estimates, please refer to the publication: "Preventing suicide: A global imperative, 2014 World Health Organization, Geneva" as accessed on 20 March, 2017 at http://www.who.int/mental_health/suicideprevention/world_report_2014

Table 2: Selected suicidal behaviour indicators among 13–17-year-old students in the WHO South-East Asia Region

Country	Suicidal ideation ^a		Suicidal ideation with a plan ^b		Suicidal attempt ^c	
Country (GSHS year)	All %	Male/ Female ratio	All %	Male/ Female ratio	All %	Male/ Female ratio
Bangladesh (2014)	4.9	0.76	7.5	1.03	6.6	1.15
Bhutan (2016)	11.6	0.74**	13.7	0.71**	11.2	0.85**
India (2007) 13-15 years	NA	NA	NA	NA	NA	NA
Indonesia (2015)	5.4	0.68**	5.6	0.82**	3.9	1.25*
Maldives (2014)	13.1	0.82*	18.6	0.84*	12.7	1.35**
Myanmar (2016)	9.4	0.72**	6.8	0.57**	8.8	0.64**
Nepal (2015)	13.7	0.92	14.0	0.85	10.0	0.83**
Sri Lanka (2016)	9.3	1.05	6.4	0.89	6.7	1.00
Thailand (2015)	12.5	1.09	14.5	1.08	13.3	1.24*
Timor-Leste (2015)	9.3	1.28*	9.6	1.32**	9.5	1.20

Notes

^{*} The male/female ratio is significantly different from one at 90% level;

^{**} The male/female ratio is significantly different from one at 95% level;

NA - Data are not available.

^a During the past 12 months, did you ever seriously consider attempting suicide (yes/no). The data here presents the percentage of the students who reported "Yes".

^b During the past 12 months, did you make a plan about how you would attempt suicide (yes/no). The data here presents the percentage of the students who reported "Yes".

^c During the past 12 months how many times did you actually attempt suicide? (0 times/ 1 time/2 or 3 times/ 4 or 5 times/ 6 or more times) The data here presents the percentage of students who reported attempting suicide one or more times in the past 12 months.

Table 3: Selected warning symptoms of mental health problems among 13–17-year-old students in the WHO South-East Asia Region

	Anx	iety ^a	Lonel	iness ^b	Have no c	ose friends ^c
Country (GSHS year)	All %	Male/ Female ratio	All %	Male/ Female ratio	All %	Male/ Female ratio
Bangladesh (2014)	4.6	0.86	10.9	1.24	8.3	0.59**
Bhutan (2016)	7.6	0.71**	12.4	0.69**	8.7	0.85**
India (2007) 13-15 years	7.7	0.85	8.4	0.75**	10.1	1.02
Indonesia (2015)	4.8	1.14	6.7	0.83*	3.0	1.72**
Maldives (2014)	15.1	0.65**	15.5	0.66**	8.7	1.17
Myanmar (2016)	3.9	0.91	8.8	0.71*	3.7	0.87
Nepal (2015)	4.4	0.99	6.6	0.97	4.3	0.73**
Sri Lanka (2016)	4.6	0.87	8.9	0.87	5.6	0.81
Thailand (2015)	9.3	0.96	9.7	1.18*	6.4	1.38
Timor-Leste (2015)	11.5	1.12	14.0	1.23*	4.4	0.76

Notes:

^{*} The male/female ratio is significantly different from one at 90% level;

^{**} The male/female ratio is significantly different from one at 95% level;

NA - Data are not available.

^a During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported feeling lonely most of the times or always.

^b During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported feeling lonely most of the times or always.

 $^{^{\}rm c}$ How many close friends do you have? (0 / 1 /2 / 3 or more). The data here presents the percentage of students who reported zero close friends.

Table 4: Selected indicators of tobacco use among 13–17-year-old students in the WHO South-East Asia Region

Constant	Current cigar	ette smoking ^a	Current to	obacco use ^b	
Country (GSHS year)	All %	Male/Female ratio**	All %	Male/Female ratio**	
Bangladesh (2014)	7.7	7.54	9.8	6.74	
Bhutan (2016)	24.6	2.91	29.3	2.44	
India (2007) 13-15 years	1.2	8.68	3.6	1.90	
Indonesia (2015)	12.5	15.99	13.6	11.09	
Maldives (2014)	9.9	2.79	12.2°	2.58	
Myanmar (2016)	7.2 ^d	29.72	9.8	7.70	
Nepal (2015)	5.9	2.53	8.0	2.18	
Sri Lanka (2016)	3.4	8.64	9.1	5.12	
Thailand (2015)	10.4	3.42	14.0	2.91	
Timor-Leste (2015)	20.1	5.35	27.1	2.53	

Notes

^{**} The male/female ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The male/female ratio is significantly different from one at 90% level;

NS - The male/female ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

^a During the past 30 days, on how many days did you smoke cigarettes? The indicator current cigarette smoking was defined as smoking cigarettes on one or more days in the past 30 days.

^b During the past 30 days, on how many days did you use any tobacco product other than cigarettes such as (country specific examples of both smoking and smokeless tobacco products)? The indicator on current tobacco use was defined as currently smoking cigarettes and/or using any tobacco product other than cigarette (country specific examples of both smoking and smokeless tobacco products).

^c The question varied slightly among countries. For example, in Maldives, the question gave example of only 'bidis' and did not explicitly asked about smokeless tobacco products.

^d In Myanmar, the question asked about use of any form of smoking tobacco rather than cigarettes only.

Table 5: Selected indicators of alcohol use among 13–17-year-old students in the WHO South-East Asia Region

Country	Current a	Current alcohol use ^a		Drunkenness ^b		Problem from drinking ^c	
Country (GSHS year)	%	Male/ Female ratio**	%	Male/ Female ratio**	%	Male/ Female ratio**	
Bangladesh (2014)	1.6	17.14	1.3	#	1.3	#	
Bhutan (2016)	24.2	2.07	23.3	2.27	10.1	2.36	
India (2007) 13-15 years	8.0 ^d	1.32	NA	NA	NA	NA	
Indonesia (2015)	4.4	4.64	3.7	7.35	2.7	6.21	
Maldives (2014)	7.1 ^d	2.58	NA	NA	NA	NA	
Myanmar (2016)	4.6	5.78	3.7	9.33	1.7	6.62	
Nepal (2015)	5.1	1.87	4.9	2.53	2.7	1.89	
Sri Lanka (2016)	3.2	5.24	NA	NA	NA	NA	
Thailand (2015)	23.0	1.41	24.9	1.14*	10.7	1.65	
Timor-Leste (2015)	15.1	2.32	10.3	3.43	8.8	2.87	

Notes

^{**} The male/female ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The male/female ratio is significantly different from one at 90% level;

NS - The male/female ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available;

[#] The male/female ratio is not computable due to 0% prevalence among females.

^a During the past 30 days, on how many days did you have at least one drink containing alcohol? The indicator current alcohol was defined as drinking alcohol on one or more days in the past 30 days.

^b During your life, how many times did you drink so much alcohol that you were really drunk? The indicator was defined as being drunk one or more times during their lifetime.

^c During your life, how many times have you got into trouble with your family or friends, missed school, or got into fights, as a result of drinking alcohol? The indicator was defined as having gotten into a problem as a result of drinking alcohol one or more times during their lifetime.

^d For India and Maldives, the data on 'current' alcohol use were not available. The data presented here refers to 'ever' alcohol use computed indirectly from other question (e.g. how old were you when you had your first drink of alcohol other than a few sips).

Table 6: Selected indicators of drug use among 13–17-year-old students in the WHO South-East Asia Region

	Current marijuana use ^a		No substance use		Multiple substance use ^b	
Country (GSHS year)	All %	Male/ Female ratio**	All %	Male/ Female ratio**	All %	Male/ Female ratio**
Bangladesh (2014)	1.6	4.72	89.7	0.88	1.3	15.92
Bhutan (2016)	12.0	5.09	63.8	0.66	20.3	3.13
India (2007) 13-15 years	2.8 ^d	0.91 ^{NS}	89.1	0.97	1.9	2.02
Indonesia (2015)	1.0	3.49	85.8	0.77	3.0	9.02
Maldives (2014)	4.4	3.89	86.1	0.88	5.6	3.27
Myanmar (2016)	1.1 ^d	8.75	89.4	0.84	3.4	11.49
Nepal (2015)	2.6	2.31	90.4	0.93	3.9	2.29
Sri Lanka (2016)	2.6	3.67	90.1	0.86	26.5	1.70
Thailand (2015)	5.3	3.19	73.5	0.84	9.1	2.35
Timor-Leste (2015)	4.6	1.76	69.9	0.68	9.5	3.30

Notes:

^{**} The male/female ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The male/female ratio is significantly different from one at 90% level;

NS - The male/female ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available;

[#] The male/female ratio is not computable due to 0% prevalence among females.

^a During the past 30 days, how many times have you used marijuana? The indicator is defined as use of marijuana one or more times in the past 30 days.

^b Percentage of students who did not report 'current' use of either tobacco, alcohol or any drug.

^c Percentage of students who reported currently using two or more substances (e.g. alcohol and tobacco, or tobacco and marijuana, or all the three substances).

^d In India, the question was not specific for marijuana use but asked use of any drugs (e.g. inhaling any fluid/ charas/ ganja one or more times in the past 12 months). In Myanmar also, the question asked was different "during your life how many times have used drugs, including marijuana, amphetamines, cocaine or inhalants. The data here presents the percentage of students who reported such use one or more times during their lifetime.

Table 7: Selected indicators of school experiences among 13–17-year-old students in the WHO South-East Asia Region

Country		ther students and helpful ^a	Bullied by other students ^b			
(GSHS year)	All %	Male/Female ratio**	All %	Male/Female ratio**		
Bangladesh (2014)	56.1	0.98 ^{NS}	24.5	1.61		
Bhutan (2016)	41.9	0.98 ^{NS}	26.3	1.00 ^{NS}		
India (2007) 13-15 years	41.6	0.84	7.1 ^c	1.12 ^{NS}		
Indonesia (2015)	39.9	0.76	20.7	1.34		
Maldives (2014)	58.8	0.88	26.7	1.04 ^{NS}		
Myanmar (2016)	38.0	0.81	50.0	1.04 ^{NS}		
Nepal (2015)	54.2	0.95 ^{NS}	50.9	1.22		
Sri Lanka (2016)	51.2	0.87	38.35	1.69		
Thailand (2015)	40.1	0.69	29.4	1.45		
Timor-Leste (2015)	27.7	0.85	27.8	1.48		

^{**} The male/female ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The male/female ratio is significantly different from one at 90% level;

NS - The male/female ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available; # the male/female ratio is not computable due to 0% prevalence among females.

^a During the past 30 days, how often were most of the student in your school kind and helpful? (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported the other students to be kind and helpful most of the times or always.

^b During the past 30 days, on how many days were you bullied? (0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10-19 days, 20-29 days, all 30 days). The data here presents the percentage of students who reported being bullied one or more days in the past 30 days.

^c In India, the standard question was not asked. The question asked was "during the past 12 months, how often have you felt (never, rarely, sometimes, most of the times, always) disturbed due to comments from your peers, family members, or teachers? The data here presents the percentage of students who felt disturbed most of the times or always.

Table 8: Selected indicators of perceived parental engagement among 13–17-year-old students in the WHO South-East Asia Region

Country	their prol	nderstood plems and ries ^a	Parents re what they with their		Parents checked if their homework was done ^c		
(GSHS year)	All %	Male/ Female ratio**	All %	Male/ Female ratio**	All %	Male/ Female ratio**	
Bangladesh (2014)	47.2	0.79	42.8	0.82*	54.0	0.94 ^{NS}	
Bhutan (2016)	43.4	0.86	37.2	0.93*	26.7	1.06 NS	
India (2007) 13-15 years	61.6	0.95*	57.0	0.89	46.7	0.99 ^{NS}	
Indonesia (2015)	34.1	0.86	40.2	0.63	33.0	1.04	
Maldives (2014)	33.4	0.99 NS	47.6	0.93 ^{NS}	29.0	1.26	
Myanmar (2016)	52.4	0.84	57.1	0.80	47.3	0.96 ^{NS}	
Nepal (2015)	53.7	0.96 NS	51.0	0.88	50.4	0.93 ^{NS}	
Sri Lanka (2016)	62.6	0.85	69.3	0.85	65.8	0.88	
Thailand (2015)	28.1	0.75	42.3	0.72	27.6	1.04 ^{NS}	
Timor-Leste (2015)	11.4	0.97 ^{NS}	23.6	0.88 ^{NS}	29.4	0.95 ^{NS}	

^{**} The male/female ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The male/female ratio is significantly different from one at 90% level;

NS - The male/female ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available; # the male/female ratio is not computable due to 0% prevalence among females.

^a During the past 30 days, how often did your parents/guardians understand your problems and worries? (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported their parents understood their problems and worries 'most of the time or always'

^b During the past 30 days, how often did your parents/guardians really know what you were doing with your free time? (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported their parents really knew what they were doing with their free time 'most of the time or always'.

^c During the past 30 days, how often did your parents/guardians check to see if your homework was done? (never, rarely, sometimes, most of the times, always). The data here presents the percentage of students who reported their parents check to see their work 'most of the time or always'

Table 9: Level of perceived parental engagement index^a among 13–17-year-old students in the WHO South-East Asia Region

Country	Low engagement b		Mediur	n engag	ement ^c	High engagement d			
(GSHS year)	All (%)	Male (%)	Female (%)	All (%)	Male (%)	Female (%)	All (%)	Male (%)	Female (%)
Bangladesh (2014)	23.4	25.2	19.8	31.3	32.4	29.2	45.3	42.4	51.1
Bhutan (2016)	37.1	38.6	35.8	29.7	30.0	29.3	33.3	31.4	34.9
India (2007) 13-15 years	20.8	21.9	19.2	23.2	23.9	22.3	56.0	54.2	58.5
Indonesia (2015)	36.5	41.7	31.3	30.9	30.1	31.8	32.6	28.2	36.9
Maldives (2014)	38.1	37.7	38.5	27.8	27.8	27.9	34.1	34.5	33.6
Myanmar (2016)	21.7	25.2	18.5	25.0	26.3	23.9	53.4	48.5	57.6
Nepal (2015)	25.8	27.4	24.3	22.1	22.8	21.5	52.0	49.9	54.2
Sri Lanka (2016)	14.6	18.0	11.4	17.6	20.0	15.3	67.8	62.0	73.3
Thailand (2015)	41.0	41.0	37.5	29.4	29.1	29.6	29.6	25.9	32.9
Timor-Leste (2015)	54.6	55.6	53.8	29.6	29.7	29.5	15.8	14.7	16.8

^a A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions, as presented in Table 8, which were common across the countries were used to create a composite parental engagement index. A binary variable is created with a value of 1 if respondent reported 'most of the times' or 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using the binary variables based on those 3 questions, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2-3.

Table 10: Parental engagement as a predictor of mental health problems — unadjusted odds ratio** showing cross-sectional association between parental engagement index^a (dependent variable, reference group=high level of engagement) and selected mental health problems (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

	Atter	npted su	icide ^b		Anxiety	:	Lonelinessd		
Country	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	1.69	1.65	1.88	1.22 ^{NS}	1.25	1.33	1.15 ^{NS}	1.06	1.42
Bhutan (2016)	1.33	1.31	1.36	1.09 ^{NS}	0.90 ^{NS}	1.24	1.21	1.16 ^{NS}	1.27
India (2007) 13-15 years	NA	NA	NA	1.33	1.27	1.42	1.54	1.44	1.67
Indonesia (2015)	1.40	1.36	1.42	1.12	1.06 ^{NS}	1.17	1.17	1.03 ^{NS}	1.33
Maldives (2014)	1.29	1.21	1.39	1.38	1.29	1.46	1.48	1.47	1.49
Myanmar (2016)	1.77	1.63	2.00	1.10 ^{NS}	1.33 ^{NS}	0.96 ^{NS}	1.36	1.17 ^{NS}	1.59
Nepal (2015)	1.65	1.56	1.77	1.37	1.41	1.39	1.18 ^{NS}	1.18 ^{NS}	1.20 ^{NS}
Sri Lanka (2016)	1.79	1.51	2.10	1.87	1.59	2.23	1.81	1.19	2.74
Thailand (2015)	1.40	1.32	1.45	1.24	0.99	1.49	1.32	1.16	1.45
Timor-Leste (2015)	0.94 ^{NS}	0.90 ^{NS}	0.97 ^{NS}	0.70	0.73	0.66	0.67	0.81 ^{NS}	0.53

Odds ratio or more than one implies that the chances (or odds) of having a specific mental health problem increases if the parental engagement index goes down, or vice-versa.

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

^a A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions, as presented in Table 8, which were common across the countries were used to create a composite parental engagement index. A binary variable is created with a value of 1 if respondent reported 'most of the times' and 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using the binary variables based on those 3 questions, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2-3. The variable is used as a continuous variable in the logistic regression, and is coded as 0 if high-, 1 medium- and 2 as low-level of parental engagement, making the high level of parental engagement as the reference group.

^b During the past 12 months how many times did you actually attempt suicide? (0 times/ 1 time/2 or 3 times/ 4 or 5 times/ 6 or more times) The binary variable used in logistic regression is coded as 1 if a student reported attempting suicide one or more times, otherwise 0.

^c During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling worried 'most of the times or always', otherwise 0.

^d During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling lonely most of the times or always, otherwise 0.

Table 11: Parental engagement as a predictor of substance use — unadjusted odds ratio** showing cross-sectional association between parental engagement index^a (dependent variable, reference group=high level of engagement) and selected substance use indicators (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

Country	Current cigarette smoking ^b		Current alcohol use ^c			Current marijuana use ^d			
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	1.22 ^{NS}	1.12	1.58	1.07 ^{NS}	1.02	#	1.10 ^{NS}	1.15	1.10
Bhutan (2016)	1.25	1.20	1.31	1.38	1.35	1.40	1.29	1.25	1.33
India (2007) 13-15 years	2.10	2.31	0.61	1.75	1.99	1.44	1.98	2.71	1.33
Indonesia (2015)	1.52	1.34	1.72	1.47	1.37	1.24 ^{NS}	2.29	1.80	3.94
Maldives (2014)	1.60	1.64	1.67	1.49	1.55	1.39	1.54	1.73	1.26
Myanmar (2016)	1.92	1.74	3.37	1.89	1.70	2.14	1.85	1.70	1.44 ^{NS}
Nepal (2015)	1.88	1.74	2.39	1.63	1.49	1.94	1.80	1.80	1.91
Sri Lanka (2016)	2.15	1.94	1.93	2.31	2.06	2.14	2.29	1.88	3.16
Thailand (2015)	1.39	1.29	1.37	1.34	1.18	1.47	1.49	1.33	1.54
Timor-Leste (2015)	1.02 ^{NS}	1.02 ^{NS}	0.96 ^{NS}	0.96 ^{NS}	1.01 ^{NS}	0.87 ^{NS}	0.86 ^{NS}	0.74 ^{NS}	1.12 ^{NS}

missing standard errors because of stratum with single sampling unit

Odds ratio or more than one implies that the chances (or odds) of substance use increases if the parental engagement index goes down, or vice-versa;

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

^a A set of 3 to 12 questions with 5 response options (never, rarely, sometimes, most of the times always) were asked in GSHS to elicit respondents' perception of the connectedness and engagement of their parents with them in the past 30 days. A set of 3 questions, as presented in Table 8, which were common across the countries were used to create a composite parental engagement index. A binary variable is created with a value of 1 if respondent reported 'most of the times' and 'always' for a particular question, and value of 0, otherwise. A summative parental engagement index was created using the binary variables based on those 3 questions, which was categorized as 'low' if score of 0, 'medium' if score of 1, and 'high' if score of 2-3. The variable is used as a continuous variable in the logistic regression, and is coded as 0 if high-, 1 medium- and 2 as low-level of parental engagement, making the high level of parental engagement as the reference group.

^b During the past 30 days, on how many days did you smoke cigarettes? The binary indicator for current cigarette smoking used logistic regression was coded as 1 if a student reported smoking cigarettes on one or more days in the past 30 days, otherwise 0.

^c During the past 30 days, on how many days did you have at least one drink containing alcohol? The binary indicator for current alcohol used in logistic regression was coded as 1 if a student reported drinking alcohol on one or more days in the past 30 days, otherwise 0

^d During the past 30 days, how many times have you used marijuana? The binary indicator for current marijuana use used in logistic regression is coded as 1 if a student reported using marijuana one or more times in the past 30 days, otherwise 0.

Table 12: Being bullied as a predictor of mental health problems — unadjusted odds ratio** showing cross-sectional association between bullying^a (dependent variable, reference group=no bullying) and selected mental health problems (independent/outcome variables) among 13–17-year-old students in the WHO South-East Asia Region

Country	Atter	mpted su	ıicide ^b	Anxiety ^c			Lonelinessd		
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	3.45	3.57	3.05	3.36	3.21	3.61	3.17	3.22	2.68
Bhutan (2016)	2.69	3.14	2.37	2.02	1.76	2.21	1.99	1.74	2.17
India (2007) 13-15 years	NA	NA	NA	4.95	4.83	5.08	6.93	7.19	7.14
Indonesia (2015)	3.79	4.07	3.31	3.07	3.11	3.05	3.20	3.35	3.24
Maldives (2014)	3.29	3.45	3.04	2.62	2.94	2.55	2.86	2.32	3.56
Myanmar (2016)	3.36	3.38	3.44	4.00	4.31	3.84	3.42	1.82	5.91
Nepal (2015)	2.80	2.93	2.77	2.83	2.50	2.71	2.44	2.50	2.37
Sri Lanka (2016)	2.30	1.56	3.37	4.53	3.20	6.56	3.17	2.46	4.40
Thailand (2015)	5.20	6.17	4.39	3.45	3.22	3.91	3.89	4.08	3.60
Timor-Leste (2015)	4.02	3.08	5.24	2.19	1.83	2.62	1.89	1.44	2.21

Odds ratio or more than one implies that the chances (or odds) of a specific mental health problem increases if a student is bullied, or vice-versa;

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

[#] Missing standard errors because of stratum with single sampling unit

^a During the past 30 days, on how many days were you bullied? (0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10-19 days, 20-29 days, all 30 days). The indicator used in logistic regression is coded as 1 if a student reported being bullied one or more days in the past 30 days, otherwise 0.

^b During the past 12 months how many times did you actually attempt suicide? (0 times/ 1 time/2 or 3 times/ 4 or 5 times/ 6 or more times) The binary variable used in logistic regression is coded as 1 if a student reported attempting suicide one or more times, otherwise 0

^c During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling worried 'most of the times or always', otherwise 0.

^d During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling lonely most of the times or always, otherwise 0.

Table 13: Being bullied as a predictor of substance use — unadjusted odds ratio** showing cross-sectional association between bullying^a (dependent variable, reference group=no bullying) and selected substance use indicators (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

Country	Cigarette smokers ^b		Alcohol users ^c			Marijuana users ^d			
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	3.77	3.25	4.51	6.81	5.47	#	4.91	4.87	#
Bhutan (2016)	1.47	1.41	1.66	1.59	1.42	1.90	1.24	1.12	1.78
India (2007) <i>13-15 years</i>	4.42	4.68	1.76	2.98	3.68	2.00	2.20	1.56	2.83
Indonesia (2015)	1.98	1.65	3.58	3.08	2.66	3.27	5.47	3.77	12.56
Maldives (2014)	2.99	2.64	4.30	4.29	4.10	4.84	5.13	4.88	7.71
Myanmar (2016)	2.94	3.03	8.99	2.58	2.33	3.54	3.28	2.73	#
Nepal (2015)	3.45	2.74	3.85	2.71	2.14	3.12 ^{NS}	3.31	5.42	1.44 ^{NS}
Sri Lanka (2016)	3.65	1.97	#	3.07	1.79	6.88	5.01	2.50	26.73
Thailand (2015)	3.48	2.67	4.77	2.30	1.78	2.80	6.77	5.09	9.23
Timor-Leste (2015)	3.51	2.56	7.37	3.34	2.54	3.94	5.73	4.93	6.12

Odds ratio or more than one implies that the chances (or odds) of substance use increases if a student is bullied, or vice-versa;

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

[#] Missing standard errors because of stratum with single sampling unit

^a During the past 30 days, on how many days were you bullied? (0 days, 1 or 2 days, 3 to 5 days, 6 to 9 days, 10-19 days, 20-29 days, all 30 days). The indicator used in logistic regression is coded as 1 if a student reported being bullied one or more days in the past 30 days, otherwise 0.

^b During the past 30 days, on how many days did you smoke cigarettes? The binary indicator for current cigarette smoking used logistic regression was coded as 1 if a student reported smoking cigarettes on one or more days in the past 30 days, otherwise 0.

^c During the past 30 days, on how many days did you have at least one drink containing alcohol? The binary indicator for current alcohol used in logistic regression was coded as 1 if a student reported drinking alcohol on one or more days in the past 30 days, otherwise 0.

^d During the past 30 days, how many times have you used marijuana? The binary indicator for current marijuana use used in logistic regression is coded as 1 if a student reported using marijuana one or more times in the past 30 days, otherwise 0.

Table 14: Mental health problems as predictor of cigarette smoking — unadjusted odds** ratio showing cross-sectional association between selected mental health indicators (dependent variable, reference group=no mental problems) and cigarette smoking^a (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

Country	Suicidal ideation ^b (ref=No)		Anxiety ^c (ref=No)			Loneliness ^d (ref=No)			
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	2.22 ^{NS}	2.14	7.43	2.08 ^{NS}	2.06	5.67	1.92	1.62	6.63
Bhutan (2016)	1.93	1.94	2.95	1.45	1.32 ^{NS}	2.20	1.30	1.40	1.78
India (2007) 13-15 years	2.81	2.77	3.18	2.75	2.89	4.93	2.25	2.32	4.16
Indonesia (2015)	1.80	2.07	8.89	1.58	1.47	3.00	1.57	1.97	1.73 ^{NS}
Maldives (2014)	3.23	2.92	6.08	2.00	2.32	2.84	1.92	2.05	2.84
Myanmar (2016)	2.50	3.83	1.00	2.04	2.26	4.06 ^{NS}	1.69	2.45	1.63 ^{NS}
Nepal (2015)	3.15	3.43	3.32	5.03	5.36	4.64	3.45	2.78	4.56
Sri Lanka (2016)	2.04	1.69	4.72	3.07	2.42	9.78	2.20	2.29	1.67
Thailand (2015)	2.58	2.27	3.35	2.82	2.36	4.69	2.76	2.26	4.06
Timor-Leste (2015)	1.63	1.42	2.40	1.82	1.45 ^{NS}	3.00	1.60	1.30 ^{NS}	2.32

Odds ratio or more than one implies that the chances (or odds) of cigarette smoking increases if a student has a mental health problem, or vice-versa;

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

[#] Missing standard errors because of stratum with single sampling unit

^a During the past 30 days, on how many days did you smoke cigarettes? The binary indicator for current cigarette smoking used logistic regression was coded as 1 if a student reported smoking cigarettes on one or more days in the past 30 days, otherwise 0.

^b During the past 12 months, did you ever seriously consider attempting suicide (yes/no). The binary variable used in logistic regression is coded 1 if a student reported having considered attempting suicide, otherwise 0.

^c During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling worried 'most of the times or always', otherwise 0.

^d During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling lonely most of the times or always, otherwise 0.

Table 15: Mental health problems as predictor of alcohol use — unadjusted odds** ratio showing cross-sectional association between selected mental health indicators (dependent variable, reference group=no mental problems) and current alcohol drinking^a (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

Country	Suic	Suicidal ideation ^b (ref=No)		Anxiety ^c (ref=No)			Loneliness ^d (ref=No)		
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	7.20	8.79	#	10.27	11.35	29.79	7.89	8.04	#
Bhutan (2016)	1.69	1.41	2.45	1.52	1.54	1.85	1.26	1.32 ^{NS}	1.50
India (2007) 13-15 years	NA	NA	NA	2.31	2.75	1.82	2.08	2.28	1.95
Indonesia (2015)	3.10	4.12	2.95	2.32	2.40	1.75 ^{NS}	2.06	2.53	1.70 ^{NS}
Maldives (2014)	4.05	4.47	5.32	2.50	3.03	3.54	2.43	2.65	3.19
Myanmar (2016)	3.62	3.39	11.61	2.69	3.43	0.89 ^{NS}	1.90	1.66 ^{NS}	5.63
Nepal (2015)	2.07	1.37 ^{NS}	3.70	2.65	3.39	1.30 ^{NS}	3.41	3.00	3.86
Sri Lanka (2016)	2.16	2.30	1.71	3.74	3.62	4.55	2.25	2.06	3.51
Thailand (2015)	2.66	2.04	3.42	2.40	1.37	3.99	2.26	1.44	3.56
Timor-Leste (2015)	2.45	1.95	2.69	1.75	1.64	1.74	1.50	1.14 ^{NS}	1.75

Notes: ** The odds ratio is significantly different from one at 95% level, unless noted otherwise;

Odds ratio or more than one implies that the chances (or odds) of current alcohol use increases if a student has a specific mental health problem, or vice-versa;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

[#] Missing standard errors because of stratum with single sampling unit

^a During the past 30 days, on how many days did you have at least one drink containing alcohol? The binary indicator for current alcohol used in logistic regression was coded as 1 if a student reported drinking alcohol on one or more days in the past 30 days, otherwise 0.

^b During the past 12 months, did you ever seriously consider attempting suicide (yes/no). The binary variable used in logistic regression is coded 1 if a student reported having considered attempting suicide, otherwise 0.

^c During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling worried 'most of the times or always', otherwise 0.

^d During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling lonely most of the times or always, otherwise 0.

Table 16: Mental health problems as predictor of marijuana use — unadjusted odds ratio** showing cross-sectional association between selected mental health indicators (dependent variable, reference group=no mental problems) and current marijuana use^a (independent or outcome variable) among 13–17-year-old students in the WHO South-East Asia Region

Country	Suicidal ideation ^b (ref=No)		Anxiety ^c (ref=No)			Loneliness ^d (ref=No)			
(GSHS year)	All	Male	Female	All	Male	Female	All	Male	Female
Bangladesh (2014)	4.04 ^{NS}	5.93	#	8.54	8.48	#	9.26	8.47	3.37
Bhutan (2016)	1.77	1.86	3.07	1.24 ^{NS}	1.08 ^{NS}	2.62	1.30 ^{NS}	1.42 ^{NS}	1.99
India (2007) 13-15 years	NA	NA	NA	2.39	2.46	2.38	2.12	1.95	2.34
Indonesia (2015)	3.43	3.77	4.65	4.72	5.29	2.79	2.84	3.23	2.61
Maldives (2014)	6.03	7.58	5.28	2.03	2.44	3.29	2.35	3.21	1.85
Myanmar (2016)	4.58	6.52	2.30	9.26	8.54	17.59 ^{NS}	1.97	2.93	#
Nepal (2015)	2.48	1.83 ^{NS}	4.31	5.48	6.07	3.88 ^{NS}	5.39	4.64	6.25
Sri Lanka (2016)	2.93	2.03	6.22	3.12	2.67	4.26	2.49	2.15	2.84
Thailand (2015)	4.83	3.91	8.22	3.69	3.18	6.09	3.36	2.76	4.19
Timor-Leste (2015)	2.76	2.15 ^{NS}	3.77	1.87	1.58 ^{NS}	2.47	1.41 ^{NS}	1.08 ^{NS}	2.20 ^{NS}

Odds ratio or more than one implies that the chances (or odds) of current alcohol use increases if a student has a specific mental health problem, or vice-versa;

^{**} The odds ratio is significantly different from one at 95% level, unless noted otherwise;

^{*} The odds ratio is significantly different from one at 90% level;

NS - The odds ratio is not significantly different from one at either 90% or 95% level;

NA - Data are not available.

[#] Missing standard errors because of stratum with single sampling unit

^a During the past 30 days, how many times have you used marijuana? The binary indicator for current marijuana use used in logistic regression is coded as 1 if a student reported using marijuana one or more times in the past 30 days, otherwise 0.

^b During the past 12 months, did you ever seriously consider attempting suicide (yes/no). The binary variable used in logistic regression is coded 1 if a student reported having considered attempting suicide, otherwise 0.

^c During the past 12 months, how often have you been so worried about something that you could not sleep at night (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling worried 'most of the times or always', otherwise 0.

^d During the past 12 months, how often have you felt lonely? (never, rarely, sometimes, most of the times, always). The binary variable used in logistic regression is coded 1 if a student reported feeling lonely most of the times or always, otherwise 0.

Adolescents constitute an important social and demographic group in the WHO South-East Asia Region, accounting for almost one fifth of the total population of the Region. The failure to recognize and address mental health problems in children and adolescents is a serious public health problem in the context of Sustainable Development Goals (SDG 3.4 and 3.5). Mental health conditions such as depression, anxiety or other conditions may lead to behavioural problems such as tobacco, alcohol and drug use. The multi-directional linkages between mental health conditions and other health, educational, social and development problems call for evidence for action in this area. This publication, is a step towards building an evidence base to facilitate informed policy and programmatic actions by the WHO Regional Office for South-East Asia.

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