

PERILAKU BERISIKO KESEHATAN DAN FAKTOR YANG MEMPENGARUHINYA PADA REMAJA SEKOLAH MENENGAH PERTAMA DI JAWA DAN SUMATRA

Identifying Concerned Health Behaviours and Related Factors Among Students in Java and Sumatra

Rachmalina Soerachman, Nunik Kusumawardani¹
Pusat Teknologi Intervensi Kesehatan Masyarakat

[Email: nitas_aunt@yahoo.com](mailto:nitas_aunt@yahoo.com)

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ABSTRACT

Several behaviour health risks such as lack of physical activity, smoking and violence have contributed to the health status among adolescents. Those behaviour health risks can be associated with family relationship, school environment and other related social cultural and economy determinants. Consequently, those behaviour risk factors may lead to certain non-communicable disease. To describe the behaviour risk factors among adolescents and their determinant factors. This study employed a two-stage cluster sample design to produce a representative sample of students in 7th-9th grade, aged 13 – 15 years. In this study 3,116 questionnaires were completed in 49 schools in Java and Sumatra islands. Data was analyzed descriptively to provide proportion of certain behavior risk factors. Data analysis was done using Epi-info. Study showed 10.9%-21.6% of boys students in Java and Sumatra smoked a day or over in the period of one month. Among the smoking students about 71.1% of adolescents started smoking at aged 13 years or younger. Approximately 37% - 41% adolescents experienced having physical fighting at least once or more during the last one year. The prevalence of physical fighting was higher among boys than girls. The behavior health risks are alarming and need further specific intervention based on issues priority to improve the health behavior among adolescents in order to prevent certain non-communicable disease in the older age.

Keywords: factor risiko perilaku, pelajar, penyakit tidak menular

ABSTRAK

Kurangnya aktifitas fisik, merokok dan kekerasan adalah beberapa perilaku yang diidentifikasi sangat berpengaruh pada kesehatan pelajar khususnya anak remaja. Perilaku-perilaku berisiko tersebut disebabkan oleh beberapa faktor diantaranya adalah lingkungan keluarga, sekolah dan lainnya yang akibatnya dapat menjurus ke masalah penyakit tidak menular. Studi ini bertujuan untuk mendeskripsikan perilaku-perilaku berisiko pada pelajar dan faktor-faktor yang mempengaruhinya. Responden penelitian adalah pelajar usia 13-15 tahun di 49 sekolah di Pulau Jawa dan Sumatra yang dipilih berdasarkan stratified random sampling. Pengumpulan data dilakukan dengan pengisian kuesioner oleh pelajar sendiri. Analisa data menggunakan Epi-info. Sebanyak 10.9% - 21.6% of pelajar laki-laki di Jawa-Sumatra merokok sehari atau lebih dari sehari dalam jangka waktu sebulan terakhir. Diantara pelajar yang merokok tersebut, 71.1% diantara mulai merokok umur 13 bahkan sebelum umur 13 tahun. Sebanyak 37%-41% pelajar di Jawa-Sumatra pernah berkelahi sekali atau lebih dalam kurun waktu setahun terakhir. Prevalens perilaku berkelahi lebih tinggi pada pelajar laki-laki daripada pelajar perempuan. Sebagian besar masalah kesehatan pelajar ternyata masih kurang mendapat perhatian dari kesehatan masyarakat. Temuan diatas perlu mendapat tindak lanjut lebih khusus dan ditujukan pada pelajar, terutama mengenai perilaku hidup bersih dan sehat yang sesuai dengan tingkatan pelajar. Hal ini untuk mencegah timbulnya penyakit tidak menular akibat perilaku berisiko tersebut.

Kata kunci: *Health behaviour, Factors, Students*

INTRODUCTION

In 2001, WHO, in collaboration with UNAIDS, UNESCO, and UNICEF, and with technical assistance from the US Centers for Disease Control and Prevention (CDC), initiated development of the Global School-based Student Health Survey (GSHS). Since 2003, Ministries of Health and Education around the world have been using the GSHS to periodically monitor the prevalence of important health risk behaviours and protective factors among students.

To date, more than 50 countries have completed a GSHS. This report describes results from the first GSHS conducted in INDONESIA by the World Health Organization in collaboration with Ministry of Health, Ministry of Education, with technical assistance from US Centres for Disease Control and Prevention (CDC) conducting GSHS during October to December of 2007.

The purpose of the GSHS is to provide accurate data on health behaviours and protective factors among students to:

- Help countries develop priorities, establish programmes, and advocate for resources for school health and youth health programmes and policies;
- Establish trends in the prevalence of health behaviours and protective factors by country for use in evaluation of school health and youth health promotion; and
- Allow countries, international agencies, and others to make comparisons across countries and within countries regarding the prevalence of health behaviours and protective factors.

The GSHS is a school-based survey conducted primarily among students aged 13-15 years. It measures behaviours and protective factors related to the leading causes of mortality and morbidity among youth and adults in INDONESIA:

- Alcohol and other drug use
- Dietary behaviours
- Hygiene

- Mental health
- Physical activity
- Protective factors
- Sexual behaviours that contribute to HIV infection, other STI, and unintended pregnancy
- Tobacco use
- Violence and unintentional injury

This article is part of The INDONESIA GSHS study. The article describes the information related to concern identified health behaviours and related factors of adolescents' students.

METHOD AND STUDY PROTOCOL

The 2007 INDONESIA GSHS employed a two-stage cluster sample design to produce a representative sample of students in KELAS (class) 7-9. The first-stage sampling frame consisted of all schools containing any of KELAS (class) 7-9. Schools were selected with probability proportional to school enrolment size. Fifty (50) schools were selected to participate in the INDONESIA GSHS.

The second stage of sampling consisted of randomly selecting intact classrooms (using a random start) from each school to participate. All classrooms in each selected school were included in the sampling frame. All students in the sampled classrooms were eligible to participate in the GSHS. A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection.

For the 2007 INDONESIA GSHS, 3,116 questionnaires were completed in 49 schools. The school response rate was 98 %, the student response rate was 95 %, and the overall response rate was 93%. The data set was cleaned and edited for inconsistencies. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending Class 7 -9 in

INDONESIA. Missing data were not statistically imputed. Software that takes into consideration the complex sample design was used to compute prevalence estimates and 95% confidence intervals. GSHS data are representative of all students attending Class 7-9 in INDONESIA.

Findings

Adolescents health is one of the important health issues in human health life cycle. Health status in adult mostly as the outcome of health behavior of lifestyle in younger age, such as during adolescence. Healthy behaviour during younger age is one

of the important aspects to create more qualified and productive human resources in the future. Several behaviour risk factors in adolescent include smoking, unhealthy diet, lack of physical activity, personal hygiene and sanitation, stress/depression, drug abuse, and alcohol consumption.

According to the GSHS result, main concerns for Indonesia include high exposure to smoking environment where people smoke in front of children; unintended injuries and violence particularly on situation where children were bullied, seriously injured, and experienced physical attacks; low physical activities where students spent times on sedentary leisure

Table 1: Concerned Health Behaviours and Related Factors in Indonesia

Top concerned issue	Indonesia	Java	Sumatra
Proportion of students who reported people smoking in their presence on one or more days during the past 7 days	85.6 ± 1.5	86.6 ± 1.9	82.9 ± 2.0
Proportion of students who were bullied on one or more days during the past 30 days	50.0 ± 5.1	48.9 ± 6.5	52.6 ± 6.2
Proportion of students who were seriously injured one or more time during the past 12 months	45.9 ± 4.1	45.1 ± 5.4	48.2 ± 4.4
Proportion of students who were physically attacked one or more times during the past 12 months	39.8 ± 2.3	29.2 ± 3.7	44.3 ± 2.8
Proportion of students who spent three or more hours per day during a typical or usual day sitting and watching television, playing computer games, talking with friends, or doing other sitting activities	33.7 ± 3.4	35.6 ± 6.2	28.6 ± 8.2

The 2007 Indonesia GSHS shows that major concerns for health risk conditions lay around unintentional injuries and violence in schools. About 45%-55% of students in 7-8 grades had experiences bullied on one or more days during the past 30 days during the survey.

This survey covered two sub-national areas located in Java and Sumatra island in Indonesia. Number of students participated in this survey was 1,521 students in Java and 1,595 students in Sumatra. The result shows similar pattern occurred in Java and Sumatra where the top most concerned issues such as passive smoking, being bullied and injury. Proportion of passive smoking and sedentary

lifestyle were slightly higher in Java than in Sumatra. Meanwhile proportion of being bullied, injury and experienced physical attack were higher in Sumatra than in Java. Students in Java more likely to have sedentary life style than their peers in Sumatra (35.6% vs 28.6%) as well as comparing to the national proportion (33.7%). In other word, about one third of students aged 13 to 15 years in Indonesia spent three or more hours per day during a typical day sitting and watching television, playing computer game, talking with friends, or doing other sitting activities.

Tobacco Use

About 1.1 billion people worldwide smoke and the number of smokers continue to increase. Among these, about 84% live in developing and transitional economy countries. Currently 5 million people die each year from tobacco consumption, the second leading cause of death worldwide. If present consumption patterns continue, it is estimated that deaths from tobacco consumption will be 10 million people per year by 2020 (WHO, 2006). The overwhelming majority of smokers begin tobacco use before they reach adulthood. Among those young people who smoke, nearly one-quarter smoked their first cigarette before they reached the age of ten.

Smokers have markedly increased risks of multiple cancers, particularly lung cancer, and are at far greater risk of heart disease, strokes, emphysema and many other fatal and non-fatal diseases. It is also known that chewing tobacco may increase risks of having cancer of the lip, tongue and mouth. Children are at particular risk from adults' smoking. Adverse health effects of smoking include pneumonia and bronchitis, coughing and wheezing, worsening of asthma, middle ear disease, and possibly neuro-behavioural impairment and cardiovascular disease in adulthood. Some studies show that parental smoking is associated with higher youth smoking (WHO,2002).

Table 2. Tobacco use among students, by sex, INDONESIA, 2007

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Smoked cigarettes on one or more days during the past 30 days	10.9% (8.3 – 13.5)	21.6% (16.9 – 26.2)	0.8% (0.3 – 1.3)
Among students who smoked cigarettes during the past 30 days, those who tried their first cigarette at age 13 or younger	71.1 % (66.3 – 75.9)	71.4% (66.4 – 76.3)	NA
Used any other form of tobacco, such as sirih or cerutu , on one or more days during the past 30 days	3.9 % (2.9 - 4.8)	6.7 % (4.9- 8.4)	1.1 % (0.6 - 1.6)
Among students who smoked cigarettes during the past 12 months, those who tried to stop smoking cigarettes	85.5 % (79.8 - 91.2)	87.5 % (81.9-93.1)	NA
People smoked in their presence on one or more days during the past seven days	85.5 % (83.9 - 87.0)	87.8 % (85.9- 89.7)	83.2 % (81.4 - 85.0)
Have a parent or guardian who uses any form of tobacco	66.4 % (61.8- 70.9)	63.7% (58.4- 69.1)	69.1 % (64.6 - 73.6)

*95% confidence interval.

Smoking is one of the major health risk behaviour issues among Indonesian young male adolescents in Indonesia, The proportion of male students who smoked cigarettes was 21.6 % but the proportion among the females was quite low (0.8%). Among students who smoked cigarettes during the past 30 days, 71.1% tried their first cigarette at age 13 years or younger. Overall, about 3.9% of students used any other form of tobacco on one or more days

during the past 30 days. Male students (6.7%) are significantly more likely than female students (1.1%) to use any other form of tobacco on one or more days. Among students who smoked cigarettes during the past 12 months 87.5% of males and 83.2% females tried to stop smoking cigarettes.

Overall, 66.4% of students had a parent or guardian who uses any form of tobacco. Proportion of students who admitted

that had a parent or guardian used any form of tobacco was slightly higher among the females (69.1%) than males (63.7%).

higher rates than those aged 10-14 years (64 compared to 29 per 100,000).

Violence and Unintentional Injury

Unintentional injuries are a major cause of death and disability among young children (WHO-UNICEF, 2005). Each year, about 875,000 children under the age of 18 die from injuries and 10 to 30 million have their lives affected by injury. Injury is highly associated with age and gender. Males aged 10-14 have 60% higher injury death rates than females. Teenagers aged 15-19 have

Estimated global homicide death rate for males aged 15-17 is 9 per 100,000 (WHO,2005). For every youth homicide, approximately 20 to 40 victims of non-fatal youth violence receive hospital treatment (WHO, 2002). Many unintentional injuries lead to permanent disability and brain damage, depression, substance abuse, suicide attempts, and the adoption of health risk behaviours. 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 (Anti Bullying Center, 2002).

Table 3. Violence and unintentional injury among students, by sex, INDONESIA, 2007

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Were in a physical fight one or more times during the past 12 months	33.6 % (30.4 - 36.9)	46.9 % (42.8- 51.1)	20.6 % (17.5 - 23.8)
Were seriously injured one or more times during the past 12 months	45.9 % (41.9 - 50.0)	55.4 % (50.1- 60.7)	36.8 % (33.3 - 40.3)
Among students who were seriously injured during the past 12 months, those whose most serious injury happened to them while they were playing or training for a sport	24.1 % (21.3 - 26.8)	30.0% (26.2- 33.9)	15.5% (11.0 - 20.0)
Among students who were seriously injured during the past 12 months, those whose most serious injury was the result of a fall	40.2 % (37.7 - 42.7)	39.9 % (36.9- 42.9)	40.9 % (37.4 - 44.5)
Among students who were seriously injured during the past 12 months, those who most serious injury was the result of them hurting themselves by accident	51.6 % (47.3 - 55.9)	50.8 % (45.2- 56.4)	52.7 % (47.7 - 57.7)
Among students who were seriously injured during the past 12 months, those who had a broken bone or dislocated joint as their most serious injury	36.6 % (32.5 - 40.8)	42.0 % (36.6- 47.4)	28.9 % (24.4 - 33.4)
Were bullied on one or more days during the past 30 days	49.7 % (44.7 - 54.7)	55.0 % (48.9- 61.2)	44.7 % (40.5 48.9)
Among students who were bullied during the past 30 days, those who were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors	8.2 % (6.4 - 9.9)	10.9 % (8.3- 13.4)	5.1 % (3.1 - 7.1)

*95% confidence interval.

This survey describes that physical fight and injury were more common among male students. As can be seen from Table 3, 33.6% of students were in a physical fight one or more times during the past 12 months. Male students (46.9%) are significantly more likely than female students (20.6%) to have been in a physical fight. Overall, 45.9% of students were seriously injured one or more times during the past 12 months. Male students (55.4%) are significantly more likely than female students (36.8%) to have been seriously injured. Among students who were seriously injured during the past 12 months, 24.1% were playing or training for a sport when their most serious injury happened to them, 40.2% had their most serious injury caused by a fall, 51.6% had their most serious injury occur as a result of hurting themselves by accident, and 36.6% experienced a broken bone or dislocated joint as their most serious injury. Male students (30.0%) are significantly more likely than female students (15.5%) to be playing or training for a sport when their most serious injury happens to them. Male students (39.9%) and female students (40.9%) are equally likely to have their most serious injury be caused by a fall. Male students (50.8%) and female students (52.7%) are equally likely to have their most serious injury be as a result of hurting themselves by accident. Male students (42.0%) are significantly more likely than female students (28.9%) to experience a broken bone or dislocated joint as their most serious injury.

Bullying also more common among the males students. Overall, 49.7% of students were bullied on one or more days during the past 30 days. Proportion of those were bullied was higher among males (55.0%) than females (44.7%). Among students who were bullied during the past 30 days, 8.2% were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors. **Male students (10.9%) are significantly more likely than female students (5.1%) to be bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.**

In the area of Injuries, Sumatra GSHS showed higher percentage of students who were bullied on one or more days during

the past 30 days (46%-58%), students who were seriously injured (44%-45%), and students who were physically attacked one or more times (42%-46%).

Other issues that may raise concerns to schools, families and communities are about their missing classes or schools, attentions from parents or guardians, and supportive school environment. One-third of the students (28%-36%) missed classes or school without permission on one or more days during the past 30 days, while 23%-30% of them also felt that parents and guardians never or rarely knew what they were doing with their free time. About 17%-26% of the students reported that students in their school were never or rarely kind and helpful during the past 30 days. Similar patterns of protective factors reported in Java and Sumatra GSHS reports.

Physical Activity

Another health behaviour that could be of concerns is the physical inactivity among students. Participating in adequate physical activity throughout the life span and maintaining normal weight are the most effective ways of preventing many chronic diseases, including cardiovascular disease and diabetes (WHO Assembly, 2002).

The prevalence of type 2 diabetes is increasing globally and now is occurring during adolescence and childhood (Hamiel, P, 2005). Participating in adequate physical activity also helps build and maintain healthy bones and muscles, control weight, reduce blood pressure, ensure a healthy blood profile, **reduce fat, and promote** psychological well-being (Walburton, 2006).

Roughly 60% of the world's population is estimated to not get enough physical activity. Patterns of physical activity acquired during childhood and adolescence are more likely to be maintained throughout the life span, thus sedentary behaviour adopted at a young age is likely to persist (WHO, 2003).

This survey shows that national proportion of of students who were physically active all 7 days during the past 7 days for a total of at least 60 minutes per day

was 16.5% . Male students (16.1%) and female students (16.8%) are equally likely to be physically active all 7 days during the past 7 days. Overall, 14.3% of students were physically active 7 days during a typical or usual week for a total of at least 60 minutes per day. Male students (14.6%) and female students (13.9%) are equally likely to be physically active 7 days during a typical or usual week. Overall, 78.8% of students participated in insufficient physical activity (i.e., participated in physical activity for a total of at least 60 minutes per day on five or fewer days on average). Male students (76.9%) and female students (80.8%) are equally likely to participate in insufficient physical activity.

Overall, 33.6% of students spent three or more hours per day doing sitting activities during a typical or usually. Male students (32.8%) and female students

(34.2%) are equally likely to spend three or more hours per day doing sitting activities.

Overall, 38.9% of students did not walk or bicycle to and from school during the past 7 days. Male students (40.3%) and female students (37.7%) are equally likely to not walk or bicycle to and from school during the past 7 days. Overall, 67.5% of students usually took less than 30 minutes to get to and from school each day during the past 7 days. Male students (70.8%) and female students (64.3%) are equally likely to usually take less than 30 minutes to get to and from school each day. Overall, 73.9% of students walked or bicycled to and from school for a total of 150 minutes or more during the past seven days. Male students (76.6%) and female students (71.4%) are equally likely to walk or bicycle to and from school for a total of 150 minutes or more during the past seven, days.

Table 4. Physical activity among students, by sex, INDONESIA, 2007

Question	Total % (CI)*	Sex	
		Male % (CI)	Female % (CI)
Physically active all seven days for a total of at least 60 minutes per day during the past seven days	16.5 % (14.1 - 18.9)	16.1 % (13.7- 18.4)	16.8 % (13.1 - 20.6)
Physically active seven days for a total of at least 60 minutes per day during a typical or usual week	14.3 % (12.0 - 16.6)	14.6 % (12.0- 17.2)	13.9 % (10.8 - 17.0)
Participated in physical activity for a total of at least 60 minutes per day on five or fewer days on average	78.8 % (75.1 - 82.5)	76.9 % (72.5- 81.2)	80.8 % (76.5 - 85.1)
Spent three or more hours per day doing sitting activities during a typical or usual day	33.6 % (28.7 - 38.4)	32.8% (27.1- 38.6)	34.2 % (29.1 - 39.3)
Did not walk or bicycle to and from school during the past seven days	38.9 % (31.9 -45.9)	40.3 % (32.5- 48.0)	37.7 % (30.6 - 44.8)
Usually took less than 30 minutes to get to and from school each day during the past seven days.	67.5 % (62.8 - 72.1)	70.8 % (65.5- 76.1)	64.3 % (59.2 - 69.4)
Walked or bicycled to and from school for a total of 150 minutes or more during the past seven days	73.9 % (68.5 - 79.4)	76.6 % (70.4- 82.9)	71.4 % (65.8 - 77.0)

*95% confidence interval.

Discussion

Smoking proportion in male adolescents is considerably high. Survey in high school students showed that 69.3% male high school students ever try smoking. The proportion of regular smoker in males adolescent age 15 to 19 increased from 36.8% in 1997 to 42.6% in 2000. (WHO, 2003). Result from global youth tobacco survey 2004 showed that the prevalence of student who ever smoke was 33%, while the prevalence of current smokers was 22%. (MOH, 2004).

As one of the risks behaviour among young people is tobacco consumption, one of the targets of the Indonesia Ministry of Health (MOH) programs in community empowerment and healthy behaviour is to reduce the prevalence of smoking while creating a healthy environment that is free of cigarette smoking at school, work, and public areas (Ministry of Health, 2004). Tobacco smoking is associated with major health problems. **Information about smoking behaviour can be used to predict the prevalence of non-communicable diseases such as cardiovascular diseases, diabetes, chronic obstruction pulmonary diseases, and cancer (BPS-Macro, 2004).**

The 2001 National Socioeconomic Survey (Susenas) found that the prevalence of smoking among people age 10 and older, measured by the percentage who smoked in the month preceding the survey, had increased from 23 percent in 1995 to 28 percent in 2001. The Susenas survey also showed that the largest proportion (92%) of smokers said that they usually smoke at home together with other members of their family (NIHRD, 2002a). Data from the 2001 National Health Survey (NHS) indicate that men are much more likely than women to smoke: 58 percent of men are daily smokers, compared with 1 percent of women. While from the 2002-2003 IYARHS, one in three women and 43 percent of men have started to smoke at age 14. This finding is supported by data from the 2001 Susenas which indicated that among people age 15 and older, 9 percent started to smoke at age 10-14 and 59 percent at age 15-19 (NIHRD,2002a). By this fact, we can say that from all surveys

indicated that young adults start smoking at an earlier age.

Directorate of Public Health Ministry of Health stated that information of risk behaviour among school age adolescent is crucial for developing prevention program of risk behaviour among adolescent, particularly to build more healthy and qualified young generation for the future development The WHO has developed school based survey to describe the risk behaviour and protective behaviour among school age adolescent (13 to 15 years). The Global School-based Student Health Survey (GSHS) has been conducted in 48 countries in Asia, Africa, Middle East, and Latin America. By using standardized instrument, the results can be comparable for international or country level.

Tobacco use is very high prevalence in Indonesia which reported in the global youth survey on tobacco use. In the 2007 Indonesian GSHS revealed that 84%-87% of students were exposed to people smoking in their presence on one or more days during the past 7 days.

Numerous small-scale studies have been carried out in Indonesia to measure the knowledge, attitudes, and behaviour of young people with respect to basic hygiene, health, human reproductive system, and exposure to information on these subjects.

Programs are being developed to increase the knowledge of youth on infectious diseases. Furthermore, programs are being developed to improve knowledge on mental health, neurosis, psychosis and the use of illicit and addictive drugs (Sahanaya, 2002).

CONCLUSIONS AND RECOMENDATIONS

The fact that student's behaviour tends to some health risk issues such as smoking, violence, bullying and sedentary life style indicates an alarming situation of health risk behaviour among students. Among students who smoked cigarettes during the past 30 days, most of them had tried their first cigarette at age 13 or younger. Furthermore, most students had a parent or guardian who uses any form of tobacco.

Even though scientific evidence on the efficacy of school health programmes conducted in schools is limited, such programmes have been designed to help reduce risks associated with smoking, alcohol and drug abuse among youth people. In this matter, school health programs can help students acquire communication, critical thinking, refusal and other life skills needed to avoid problems associated with smoking, alcohol and other drug use.

Regarding with physical activity, there is no significant differences between male student and female students who are likely to walk or bicycle to and from school for a total of 150 minutes or more during the past seven days. At the national level development of policies, advocacies and strategies on promotion of NCD prevention and control should be more prioritize on the improvement of fibre consumption, followed by the improvement of physical activity.

As part of school health programmes, schools can offer physical education and opportunities, both during and outside the school day, for all students to participate in physical activity sports. Physical activity helps children to stay alert and concentrate better. Students who are physically active are more likely to have higher academic performance and less disruptive behaviour. (30)

However, in this study a group of adolescent who deserves a special attention are those who are bullied on one or more days during the past 30 days. Male students and female students are equally likely to be bullied on one or more days. Among students who were bullied during the past 30 days were bullied most often by being hit, kicked, pushed, shoved around, or locked indoors.

Related with victims of bullying, school health programmes can help reduce violence and unintentional injuries in school by establishing social and physical environments that promote safety and prevent injuries and violence, providing mental health and social services to meet the needs of students.

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