

# FAMILIAL FACTORS ASSOCIATED WITH DRUG USE AMONG ADOLESCENTS IN MALAYSIA: FINDINGS FROM ADOLESCENT HEALTH SURVEY 2022

Thamil Arasu Saminathan<sup>1\*</sup>, Hamizatul Akmal Abd Hamid<sup>1</sup>, Tania Gayle Robert<sup>1</sup>, Hasimah Ismail<sup>1</sup>, Halizah Mat Rifin<sup>1</sup>, Mohd Ruhaizie Riyadzi<sup>1</sup>, Lai Wai Kent<sup>1</sup>, Noor Syaqlah Binti Shawaluddin<sup>1</sup>, Lim Kuang Kuay<sup>1</sup>, Muhammad Fadhli Mohd Yusoff<sup>1</sup>.

<sup>1</sup>Institute for Public Health, National Institutes of Health, Ministry of Health, Malaysia.



KEMENTERIAN KESIHATAN MALAYSIA  
Institut Kesihatan Umum



## Introduction

Drug use among adolescents and young adults has become widespread in recent decades. Adolescents raised in a supportive, affectionate, and accepting home environment are less likely to become socially deviant(1). This study aims to establish potentially important familial factors associated with drug use among school-going adolescents in Malaysia.

## Methods

The study utilized data from the nationwide cross-sectional Adolescent Health Survey 2022, with 33,523 school-going adolescents participating in this survey. This survey was a cross-sectional study targeted at school-going adolescents in Malaysia aged 13 to 17. A two-stage stratified cluster sampling was applied to ensure the representativeness of the samples (10). This self-administered survey used the Global School-based Student Health Survey (GSHS) core questionnaire modules and core-expanded questions. "Current drug user" was measured using the following item: "during the past 30 days, how many times have you used drugs?". Respondents who answered other than "0 times/ never" were classified as "current drug user." Descriptive and complex sample logistic regression analyses were performed using SPSS version 26.0.

## Result

The prevalence of current drug use among school-going adolescents in Malaysia is 2.9% (95%CI: 2.6, 3.3). Multiple logistic regression revealed that adolescents who are male [aOR: 2.80 (95%CI: 2.19, 3.60)], Indian ethnic [aOR: 2.36 (95%CI: 1.46, 3.82)], current alcohol drinkers [aOR: 2.17 (95%CI: 1.56, 3.02)], who was physically abused at home [aOR: 4.58 (95%CI: 3.64, 5.76)], most of the times or always hungry at home [aOR: 3.19 (95%CI: 2.14, 4.77)], verbally abused at home [aOR: 1.34 (95%CI: 1.09, 1.65)], have at least one parent who drinks alcohol [aOR: 1.50(95%CI: 1.04, 2.15)], have at least one parent who smokes manufactured cigarette or vapes [aOR: 1.41 (95%CI: 1.15, 1.73)], have insufficient parental bonding [aOR: 1.31 (95%CI: 1.06, 1.64)], and have parents who do not respect their privacy [aOR: 1.30 (95%CI: 1.02, 1.65)], were significantly associated with drug use.

Table 1: Sociodemographic characteristics of the respondents. (N=33,279)

Sociodemographic characteristic	N	%
<b>Gender</b>		
Male	15346	46.0
Female	17933	54.0
<b>Age Group</b>		
17 years old	6230	18.8
16 years old	6705	20.1
15 years old	6466	19.4
14 years old	6845	20.6
13 years old	7033	21.0
<b>Ethnic group</b>		
Malay	22961	69.1
Chinese	5053	15.2
Indian	1545	4.6
Other Bumiputeras	2942	8.8
Others	778	2.4
<b>Parents marital status</b>		
Separated or widowed	4806	14.7
Married	27880	85.3

## Discussion

This study shows that family environment factors, including parents' attitudes, behavior, and companionship are related to children's drug use. Male adolescent do engage in drug misuse more often than female(2). Similar to previous national study in Malaysia, alcohol use among drug users among adolescent (polyusers) are common (3). Physical abuse and verbal abuse of adolescence at home is associated with increased odds of alcohol use; same findings were found in another study South Africa(4). Similar to our study, a study in the USA showed that, food insecure adolescent had increase odds of drug misuse, compared with food-secure adolescents(5). Parental factors are key to reducing the odds of drug misuse among adolescent. Parents who use substances at home (alcohol or smoke) increases the odd of adolescent misusing drug. Parental monitoring and positive relations were protective factors for disruptive behavior(6).

## Conclusion

Multiple familial factors associated with drug use among adolescents suggested that prevention of drug use should begin at home. Adolescence is the most critical period for preventing drug misuse. Understanding the complex familial relationship is essential for prevention programs and policymakers.

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Table 2: Prevalence of drug use among adolescent by sociodemo characteristics

Sociodemographic characteristic	Unweighted count	Population Estimates	Prevalence %	95% Confidence Interval	
				Lower	Upper
<b>National</b>	904	59638	2.9	2.6	3.3
<b>Gender</b>					
Male	613	41923	4.1	3.5	4.9
Female	291	17716	1.7	1.4	2.1
<b>Age Group (years)</b>					
17 years old	144	10701	2.8	2.1	3.7
16 years old	131	7983	2.1	1.6	2.6
15 years old	155	9749	2.3	1.8	3.0
14 years old	202	12364	2.9	2.3	3.7
13 years old	272	18841	4.4	3.6	5.3
<b>Ethnic group</b>					
Malay	577	35942	2.8	2.4	3.3
Chinese	126	8505	2.3	1.7	3.1
Indian	100	7666	6.3	4.5	8.7
Other Bumiputeras	78	6236	2.9	2.0	4.1
Others	23	1289	2.9	1.8	4.7
<b>Parents marital status</b>					
Separated or widowed	124	7598	2.6	2.0	3.3
Married	724	48338	2.8	2.5	3.2
<b>Hunger</b>					
Most of the times or always	68	4616	9.0	6.5	12.4
Sometimes or rarely	365	22883	3.9	3.3	4.5
Never	471	32139	2.3	2.0	2.7
<b>Current alcohol drinker</b>					
Yes	162	10432	6.9	5.4	8.8
No	742	49206	2.6	2.3	3.0
<b>Parents (ecig/ smoker)</b>					
Yes	509	33837	3.7	3.1	4.4
No	358	23306	2.1	1.9	2.5
<b>Parental drinking</b>					
Yes	237	15783	4.2	3.4	5.3
No	582	38142	2.4	2.1	2.8
<b>Physical abuse</b>					
Yes	321	20572	13.5	11.2	16.2
No	582	39030	2.1	1.8	2.4
<b>Verbal abuse</b>					
Yes	514	33015	3.9	3.4	4.6
No	388	26506	2.2	1.9	2.6
<b>Parental supervision</b>					
Yes	104	7243	3.6	2.8	4.6
No	798	52291	2.8	2.5	3.2
<b>Parental connectedness</b>					
Yes	181	12199	2.5	2.0	3.1
No	722	47385	3.1	2.7	3.5
<b>Parental bonding</b>					
Yes	234	16616	2.4	2.0	2.9
No	670	43022	3.2	2.7	3.7
<b>Parental respect for privacy</b>					
Yes	267	17601	4.7	3.9	5.7
No	637	42038	2.5	2.2	2.9

Table 3: Factors associated with drug use among adolescents in Malaysia

Sociodemographic characteristic	OR	95% Confidence Interval		P-value	aOR	95% Confidence Interval		p-value *
		(95% CI)	Lower			Upper	(95% CI)	
<b>Gender</b>								
Male	2.454	1.946	3.094	0.000	2.803	2.186	3.593	0.000
Female	1.00	-	-	-	1.00	-	-	-
<b>Age Group (years)</b>								
17 years old	1.00	-	-	-	1.00	-	-	-
16 years old	0.736	0.536	1.012	0.059	0.676	0.474	0.963	0.030
15 years old	0.835	0.592	1.176	0.301	0.732	0.527	1.108	0.155
14 years old	1.043	0.737	1.474	0.812	0.764	0.497	1.079	0.115
13 years old	1.597	1.137	2.243	0.007	1.301	0.676	0.474	0.963
<b>Ethnic group</b>								
Malay	1.00	-	-	-	1.00	-	-	-
Chinese	0.814	0.574	1.153	0.914	0.594	0.375	0.941	0.027
Indian	2.338	1.608	3.400	0.245	2.363	1.460	3.825	0.001
Other Bumiputeras	1.040	0.704	1.535	0.000	0.624	0.349	1.115	0.111
Others	1.028	0.618	1.713	0.845	0.628	0.344	1.146	0.129
<b>Parents marital status</b>								
Separated or widowed	0.389	0.900	0.708	1.144	0.735	0.558	0.969	0.029
Married	1.00	-	-	-	1.00	-	-	-
<b>Hunger</b>								
Most of the times or always	4.217	2.912	6.108	0.000	3.191	2.135	4.771	0.000
Sometimes or rarely	1.700	1.427	2.026	0.000	1.276	1.048	1.553	0.015
Never	1.00	-	-	-	1.00	-	-	-
<b>Current alcohol drinker</b>								
Yes	2.774	2.149	3.580	0.000	2.170	1.559	3.022	0.000
No	1.00	-	-	-	1.00	-	-	-
<b>Parents (ecig/ smoker)</b>								
Yes	1.766	1.450	2.151	0.000	1.413	1.152	1.734	0.001
No	1.00	-	-	-	1.00	-	-	-
<b>Parental drinking</b>								
Yes	1.796	1.431	2.252	0.000	1.495	1.037	2.154	0.031
No	1.00	-	-	-	1.00	-	-	-
<b>Physical abuse</b>								
Yes	7.388	6.012	9.078	0.000	4.581	3.640	5.766	0.000
No	1.00	-	-	-	1.00	-	-	-
<b>Verbal abuse</b>								
Yes	1.817	1.555	2.124	0.000	1.339	1.088	1.648	0.006
No	1.00	-	-	-	1.00	-	-	-
<b>Parental supervision</b>								
Yes	1.00	-	-	-	1.00	-	-	-
No	0.790	0.634	0.984	0.035	0.917	0.701	1.199	0.524
<b>Parental connectedness</b>								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.247	1.012	1.538	0.039	1.055	0.814	1.366	0.686
<b>Parental bonding</b>								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.311	1.096	1.568	0.003	1.316	1.055	1.642	0.015
<b>Parental respect for privacy</b>								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.917	1.580	2.327	0.000	1.297	1.019	1.650	0.035

\*Notes: p ≤ 0.05 was considered statistically significant