

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



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Introduction

Alcohol use is the leading global risk factor for burden of disease among people aged 10–24 years (1,2). For adolescents, alcohol use could lead to long-term health consequences. Adolescents are at an important stage of growth and development; and this stage has an important impact on the development of the brain's structure and function. Alcohol intake can cause changes in the brain, causing impaired neurodevelopment, affecting cognitive and behavioural functions, and resulting in the decline of academic performance and frequent injury events (3). Adolescent alcohol consumption impairs physical and mental health during adolescence and throughout lifetime (4,5). A global study showed that alcohol (7% of Disability-adjusted life years) was one of the significant risk factors affecting people's (age from 10 to 24) health (6). Parents remain one of the most important social influencers in preventing and reducing adolescents' alcohol consumption [7]. Several studies indicate a positive association between specific parenting factors and adolescents' alcohol use (8,9). This study aims to establish potentially important familial factors associated with alcohol 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 alcohol user" was measured using the following item: "during the past 30 days, on how many days did you have at least one drink containing alcohol?" with response options range from "0 days" to all "30 days". Respondents who answered other than "0 days" were classified as "current drinkers." Descriptive and complex sample logistic regression analyses were performed using SPSS version 26.0.

Result

The demographic characteristics of survey respondents are shown in Table 1. The total number of respondents was 33,279. Respondents were almost equal in proportion by gender; male (46.1%) and female (53.9%). Majority of the respondents were Malay (69.0%) and had parents who were married (85.3%). The prevalence of current alcohol use among school-going adolescents in Malaysia is 7.4% (95%CI: 6.3, 8.7) (Table 2). Multiple logistic regression revealed that adolescents who are male [aOR: 1.43 (95%CI: 1.23, 1.68)], aged 17 years old [aOR: 2.00 (95%CI: 1.59, 2.52)], Chinese ethnic [aOR: 6.96 (95%CI: 5.02, 9.64)], who was physically abused at home [aOR: 1.90 (95%CI: 1.51, 2.40)], sometimes or rarely hungry at home [aOR: 1.20 (95%CI: 1.02, 1.42)], verbally abused at home [aOR: 1.37 (95%CI: 1.17, 1.59)], have at least one parent who drinks alcohol [aOR: 8.94 (95%CI: 6.96, 11.48)], and have insufficient parental bonding [aOR: 1.26 (95%CI: 1.06, 1.48)], were significantly associated with current alcohol use (Table 3).

Discussion

This study shows that family environment factors, including parents' attitudes, behavior, and companionship are related to children's drinking behavior. Parental drinking is highly associated with adolescence alcohol consumption. Study has shown that, this is true for both father and mother towards both male or female adolescent.(11) Boys do engage in alcohol related behaviours more often than girls (12). Just as the results in China, parental drinking is a predictor of adolescent drinking in this study (13). This study shows that alcohol use is highly associated with the Chinese ethnic, and this could be as alcohol is traditionally used in festivals and celebration among the Chinese in Malaysia. Physical abuse of adolescence at home is associated with increased odds of alcohol use. Also, similar to this study alcohol use among adolescence, were reported as a consequence of verbal abuse.(14) Similar to our study, a study in the USA showed that, food insecure adolescent had 65% increase odds of current alcohol consumption (AOR = 1.36; CI, 1.01–1.84; P = .04), compared with food-secure adolescents. Parental bonding represented a protective factor for alcohol use among adolescents. Drinking typically increases with age in adolescence. For instance, some adolescents escalate their drinking rapidly and with increasing quantity as they age, whereas others remain infrequent moderate drinkers.

Conclusions

This study provides evidence on familial factors in adolescence alcohol use in Malaysia. The implementation of alcohol-specific household rules for children entering adolescence may reduce the chances of adolescent to consume alcohol in their adolescent to reduce the risk of alcohol-related problems later in life. Indeed, early initiation and, importantly, rapid escalation of alcohol use are together associated with increased risk of experiencing alcohol-related problems in early adulthood. Multiple familial factors associated with alcohol use among adolescents suggested that prevention of alcohol use should begin at home. Adolescence is the most critical period for preventing alcohol consumption. Understanding the complex familial relationship is essential for prevention programs and policymakers.

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

Sociodemographic characteristic	N	%
Gender		
Male	15346	46.1
Female	17933	53.9
Age Group		
17 years old	6230	18.7
16 years old	6705	20.1
15 years old	6466	19.4
14 years old	6845	20.6
13 years old	7033	21.1
Ethnic group		
Malay	22961	69.0
Chinese	5053	15.2
Indian	1545	4.6
Other Bumiputeras	2942	8.8
Others	778	2.3
Parents marital status		
Separated or widowed	4806	14.7
Married	27880	85.3

Table 2: Prevalence of alcohol use among adolescent by sociodemographic characteristics

Sociodemographic characteristic	Estimates	%	95% Confidence Interval		N
			Lower	Upper	
National	152681	7.4	6.3	8.7	2009
Gender					
Male	82829	8.1	6.8	9.6	1009
Female	69852	6.8	5.7	8.0	1000
Age Group (years)					
17 years old	36914	9.6	7.7	11.8	508
16 years old	29692	7.6	6.1	9.5	420
15 years old	32020	7.6	6.2	9.3	375
14 years old	30905	7.2	6.0	8.6	388
13 years old	23150	5.3	4.3	6.5	318
Ethnic group					
Malay	16788	1.3	1.1	1.6	286
Chinese	80271	21.4	19.1	24.0	1033
Indian	6748	5.5	4.0	7.6	84
Other Bumiputeras	42669	19.3	16.3	22.9	516
Others	6204	13.6	9.1	19.9	90
Parents' marital status					
Separated or widowed	23861	8.0	6.5	9.7	334
Married	123798	7.2	6.1	8.5	1613
Experienced hunger at home					
Most of the times or always	4433	8.5	6.3	11.3	64
Sometimes or rarely	46051	7.7	6.3	9.2	601
Never	102147	7.3	6.1	8.5	1343
Parents' current ecig use /smoker					
Yes	71797	7.8	6.7	9.1	961
No	75878	6.9	5.7	8.4	980
Parents' currently consume alcohol					
Yes	111807	29.8	27.5	32.2	1432
No	27592	1.7	1.4	2.1	399
Physical abuse at home					
Yes	23138	15.0	12.9	17.4	303
No	129022	6.8	5.7	8.1	1697
Verbal abuse at home					
Yes	67957	8.1	6.8	9.5	900
No	84168	7.0	5.8	8.3	1099
Parental supervision					
Yes	12399	6.1	4.9	7.6	163
No	139465	7.6	6.4	8.9	1832
Parental connectedness					
Yes	27940	5.6	4.6	7.0	372
No	123861	8.0	6.8	9.4	1622
Parental bonding					
Yes	42671	6.2	5.2	7.4	554
No	108935	8.0	6.8	9.5	1438
Parents' respect for privacy					
Yes	118582	7.1	6.0	8.4	1571
No	32881	8.8	7.4	10.5	419

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

Sociodemographic characteristic	OR (95% CI)	95% Confidence Interval		P-value	aOR (95% CI)	95% Confidence Interval		P-value *
		Lower	Upper			Lower	Upper	
Gender								
Male	1.21	1.06	1.38	0.005	1.43	1.23	1.68	0.000
Female	1.00	-	-	-	1.00	-	-	-
Age Group (years)								
17 years old	1.90	1.52	2.36	0.000	2.00	1.59	2.52	0.000
16 years old	1.48	1.14	1.92	0.004	1.41	1.05	1.88	0.023
15 years old	1.48	1.20	1.82	0.000	1.43	1.12	1.83	0.004
14 years old	1.39	1.15	1.68	0.001	1.32	1.10	1.59	0.004
13 years old	1.00	-	-	-	1.00	-	-	-
Ethnic group								
Malay	1.00	-	-	-	1.00	-	-	-
Chinese	20.84	16.49	26.32	0.000	6.95	5.02	9.64	0.000
Indian	4.44	2.99	6.60	0.000	1.75	1.11	2.77	0.017
Other Bumiputeras	18.30	13.96	23.99	0.000	6.32	4.61	8.68	0.000
Others	12.05	7.68	18.90	0.000	5.39	3.27	8.89	0.000
Parents' marital status								
Separated or widowed	1.11	0.91	1.37	0.293	1.09	0.88	1.34	0.422
Married	1.00	-	-	-	1.00	-	-	-
Experienced hunger at home								
Most of the times or always	1.06	0.92	1.23	0.420	1.20	1.02	1.42	0.031
Sometimes or rarely	1.19	0.88	1.61	0.265	0.90	0.63	1.28	0.554
Never	1.00	-	-	-	1.00	-	-	-
Parents' current ecig use /smoker								
Yes	1.14	0.99	1.32	0.068	1.02	0.89	1.17	0.765
No	1.00	-	-	-	1.00	-	-	-
Parents' currently consume alcohol								
Yes	24.19	19.98	29.30	0.000	8.94	6.96	11.48	0.000
No	1.00	-	-	-	1.00	-	-	-
Physical abuse at home								
Yes	2.43	2.06	2.86	0.000	2.78	2.00	3.86	0.000
No	1.00	-	-	-	1.00	-	-	-
Verbal abuse at home								
Yes	1.17	1.03	1.33	0.013	1.90	1.51	2.40	0.000
No	1.00	-	-	-	1.00	-	-	-
Parental supervision								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.26	1.04	1.53	0.021	0.96	0.75	1.24	0.768
Parental connectedness								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.45	1.23	1.70	0.000	1.12	0.94	1.34	0.196
Parental bonding								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.31	1.14	1.50	0.000	1.25	1.06	1.48	0.007
Parents' respect for privacy								
Yes	1.00	-	-	-	1.00	-	-	-
No	1.27	1.11	1.44	0.000	1.09	0.93	1.28	0.279

*Notes: p ≤ 0.05 was considered statistically significant

