



Associated Factors with Early Drinking Initiation among Korean Adolescents

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Dear Editor-in-Chief

Increasing alcohol consumption among adolescents has received particular emphasis since it increases the likelihood of becoming a frequent and binge user of alcohol (1-4) and clusters with delinquent behaviors leading to negative health and social outcomes, such as smoking, risky sexual behavior, and psychological and physical injury (5-7). A few previous studies have proposed the risk factors for early initiation of alcohol consumption (5, 6). However, research into this issue has been limited by variations by ethnicity and race in the social and cultural contexts that influence adolescents lead to differences in the age of the initiation of alcohol use and in the associated risk factors (5, 6, 8, 9). Therefore, this study investigated the factors associated with earlier initiation of alcohol consumption among Korean adolescents aged 12-18 yr using nationally representative data.

This study used the 13th (year 2017) Korea Youth Risk Behavior Web-Based Survey data (the 13th KYRBS, 2017) (10) of a complex sampling method, carried out to identify the status and trends of health behaviors among Korean middle- and high-school students between grades 7 to 12.

The KYRBS protocol was approved by government in accordance with the Ethical Principles for Medical Research involving Human Subjects,

as defined by the Helsinki Declaration.

A total of 64,991 students from 400 middle schools and 400 high schools were eligible for the study, and 62,276 students completed the survey, with a response rate of 95.8%. The dependent variables included lifetime drinking experience and age of drinking initiation. Lifetime drinking experience was measured by whether a participant reported having ever had at least one drink. Age of drinking initiation was measured through an item inquiring in which grade a participant consumed more than one alcoholic drink for the first time, and was calculated by subtracting the difference between the participant's current grade and the grade in which drinking was initiated from the participant's age. The independent variables included individual, familial, and environmental factors, and all independent variables were assessed using self-reported survey data (Table 1). Factors associated with earlier drinking initiation were identified using Cox proportional hazards regression models. The dependent variable was analyzed as time to event, with the event being lifetime drinking experience. For those with lifetime drinking experience, the time to event was the age at drinking initiation. For those who did not report lifetime drinking experience, the time to event was the age reported at survey completion.



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Table 1: Associated factors with drinking initiation (N=62,276)

<i>Variable</i>		<i>RR</i>	<i>95% CI</i>	<i>P</i>
Individual Factors				
Sex	Male	1.11	1.06-1.15	<.001
	Female	1		
Subjective Health Status	Unhealthy	1.04	0.99-1.09	0.161
	Average	0.98	0.95-1.01	0.980
	Healthy	1		
Subjective Body Image	Thin	1.03	1.00-1.06	0.092
	Average	1		
	Overweight	1.06	1.03-1.09	<.001
Subjective Happiness	Unhappy	1.11	1.06-1.17	<.001
	Average	1.06	1.03-1.09	<.001
	Happy	1		
Weight Control	No	1		
	Losing weight	1.24	1.20-1.28	<.001
	Gaining weight	1.19	1.13-1.25	<.001
	Maintaining weight	1.16	1.12-1.22	<.001
Sleeping	Not enough	1.17	1.13-1.22	<.001
	Average enough	1.10	1.06-1.14	<.001
Smoking	No	1		
	Yes	2.64	2.56-2.73	<.001
Environmental Factors				
Ease of liquor purchase	No attempt	1		
	impossible	1.36	1.29-1.44	<.001
	Easily pursuable	2.19	2.11-2.27	<.001
Drinking education	No	1.04	1.01-1.07	0.006
	Yes	1		

Among Korean adolescents ranged from 12 to 18 yr old, of the aged 12 yr old, 19.9% had lifetime drinking experience; this proportion increased to 61.6% among those aged 18 yr (in 12th grade). Early drinking initiation was significantly associated with the individual factors of male gender, self-perception as overweight (RR = 1.06, 95% CI = 1.03-1.09, $P < .001$), self-perception as unhappy or average (RR = 1.11, 95% CI = 1.06-1.17, $P < .001$ and RR = 1.06, 95% CI = 1.03-1.09, $P < .001$ respectively), attempts to control one's weight, insufficient or average sleep, and smoking, as well as the environmental factors of attempting to purchase alcohol and not having received drinking education (Table 1). Effective strategies for managing drinking initiation in ado-

lescence should include interventions that consider these individual and environmental factors.

Conflict of Interest

The authors declare that there is no conflict of interests.

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