

Supplemental Material 2. Definition of variables.

Categories	Variables	Definition	Source
Dependent variable	high-risk drinking rate among yearly alcohol users	% of adults who have drunk in the last year at least 7 glasses (or about 5 cans of beer) at a time for men and 5 or more (or about 3 cans of beer) for women twice a week	KCHS
Derived variables	Current smoking rate	% of adult who had smoked at least 5 packs of cigarettes (100 cigarettes) during their lifetime and who are current smokers.	KCHS
	Perceived stress rate	% of adult who feel "very much" or "a lot" of stress in their daily life.	KCHS
	Depression experience rate	% of adult who have experienced a feeling of depression (such as sadness or despair) that interferes with their daily life for more than two weeks in a row during the last year	KCHS
	Unmet medical need rate	% of adult who have you been unable to go to the clinic or the hospital (excluding the dental clinic) in the last year when you go to there.	KCHS
	Social network with friends	% of adult who are in the most contact with the friends with the most 4 or more times a week	KCHS
	Religious activity participation rate	% of adult who regularly participate in religious activities at least once a month	KCHS
	Leisure activity participation rate	% of adult who regularly participate in leisure activities at least once a month	KCHS
	First drinking age	The average of the age when the drinkers first drank all 1 drink.	KCHS
Integral variables	Crude divorce rate	% of divorce number per 1,000 persons.	KOSIS
	No. of cultural facilities	Number of facilities for cultural activities including museum, library, art gallery, cultural center and art center per 100,000 person	KOSIS
	Health care and social welfare business rate	% of health care and social welfare service business of total field business	KOSIS
	No. of bar business.	Number of bar business per 1,000 persons.	KOSIS
	Park area in the region	Park area in the province per 1 person.	KOSIS
	Financial independence rate	% of sum of local taxes and other income of general accounting budget scale	KOSIS
	Health care expenditure rate	% of health care expenditure of total field expenditure in the province	Local finance 365
	Living alone rate.	% of number of living alone of total households	KOSIS

KCHS, Korean Community health survey; KOSIS, Korea Statistical Information System.