

COVARIATIONS OF CIGARETTE SMOKING AND OTHER HEALTH RISK BEHAVIORS
AMONG JAPANESE HIGH SCHOOL STUDENTS

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Introduction: Many studies on adolescent smoking have indicated a high covariation with other health risk behaviors. However, available data are not sufficient about which health risk behaviors may co-occur with smoking in Japanese adolescents. This study aims to determine if cigarette smoking is also engaging in other health risk behaviors among high school students in Okinawa, Japan.

Methods: Self-administered anonymous questionnaires were conducted in 1999 using a sample of 1,466 students (male: 50.5%, female: 49.5%) in grades 10 through 12 (ages 15-18) at seven public senior high schools in urban areas of Okinawa, Japan. Health risk behaviors studied included cigarette smoking, alcohol drinking, thinner use, nonuse of seatbelts, suicide ideation, sexual intercourse, weight loss practices, and physical inactivity.

Results: The percentage of current smokers of the students was 17.4%. The prevalence of smoking was significantly higher among male students, vocational high school students, and those whose parental education level was less than high school. In the logistic regression models that controlled for sociodemographic variables, smoking was significantly associated with all health risk behaviors except physical inactivity. In particular, associations of alcohol drinking and sexual intercourse with smoking were strong (OR = 4.9 and 5.8). As for gender differences, statistically significant odds ratios existed for alcohol drinking, sexual intercourse, and nonuse of seat belts associated with smoking among male students. Among female students, all of the odds ratios for health risk behaviors were statistically significant, except for physical inactivity. Generally, the odds ratios of female students were higher than those of male students.

Discussion: In conclusion, Japanese high school students who smoked cigarettes may be at higher risk for engaging in other health risk behaviors. Particularly, alcohol drinking and sexual intercourse are more likely to co-occur with smoking. These findings suggest that smoking prevention programs should take into consideration integration with other health risk behaviors.