

**Substance use among Taiwan adolescents, based on two studies:**

Study 1: Time trend of substance use among adolescent students in Taiwan, 1991-1996, P Chou et al., Journal of Formosa medical Association, 1999 Vol 98, #12.

Study 2: Substance use disorders among adolescents in Taiwan: prevalence, sociodemographic correlates and psychiatric co-morbidity; MY Chong, KW Chan, AT Cheng, Psychological Medicine, 1999 Vol 29.

**Aims:** the first study compares the prevalence of substance use among students during 3 points between 1991 and 1996. The other aimed to report on the prevalence of substance use disorders and the extent of other mental health problems accompanying substance use.

**Methods:** the first study sampled students in middle (age 13-15) high (16-18), vocational (16-18) and junior college (16-19) in 1991, 1993, 1994, 1995 and 1996. The second study surveyed Grade 9 students in one randomly sampled high, moderate and low pass rate school in an urban, suburban and rural district, for a total of 780 students. Substances studied were alcohol, betel, tobacco and illicit drugs.

**Results:**

- males were much more likely than females to use tobacco and alcohol but this difference declined between 1991 and 1996; the overall prevalence of SUDs was about 6 times higher for males than females and was consistent for all substances;
- illicit substances most used were amphetamine, glue and flunitrazepam; rates of use of these substances were much lower than in western countries;
- prevalence of substance use disorder (SUD) was 11%;  $\frac{3}{4}$  of the SUD cases involved tobacco alone; prevalence of SUD with an illicit substance was quite low – just 2 cases;
- glue sniffing became more common than amphetamine between 1991 and 1996; alcohol use became more common than tobacco use in this same period;
- betel use is relatively common in rural areas;
- clear trend toward earlier use of tobacco and alcohol between 1991 and 1996.
- prevalence of use and SUD was quite a bit higher in poorer performing classes;
- SUD was more prevalent in rural students for tobacco and betel but not for alcohol;
- rate of accompanying mental health problems was much higher among those with SUD than with controls;
- most common mental health disorders among those with SUD were conduct disorder and attention deficit disorder

**Authors' Comments:** As Taiwanese society becomes more modernized, traditional gender differences in substance use rates are declining. The higher rate of SUD among rural students might be explained by the fact that many rural parents temporarily migrate to work in cities leaving children with relatives; other studies have found a high prevalence of depression among rural youth in Taiwan. There is also a pattern whereby children with better school performance and higher socio-economic means leave rural communities, leaving behind those that are disadvantaged. Also betel is more available in rural areas and its use is more the norm.

**Reviewer's Comments:** These two studies offer a profile of substance use among Taiwan teenagers. It portrays a shifting trend toward earlier use of tobacco and alcohol and greater similarity in patterns between males and females. While illicit substance use is less of an issue than in western countries, there is clearly a need for prevention

programming focusing on alcohol, tobacco and betel, particularly in rural areas and in schools that have more poor performing students. It appears that rural youth would benefit from coping skills in dealing with temporarily absent parents and mental health issues.