

# Substance use problems in developing countries

Ambros Uchtenhagen<sup>1</sup>

“Recurring economic and political crises in various parts of the world, serious environmental problems, and widespread insecurity about the future” (W1) have increased the gap between rich and poor, between countries and also within countries. What do we know about the role of substance use and the risk factors and impact of substance use problems in this context?

The problems have to a large extent been stabilized in developed countries that have been exposed to substance use for decades, in contrast to many developing countries and countries with former socialist economies (2). Alcohol use is rising rapidly in some of the developing regions (W3): early onset and excessive drinking are reported; large increases in cigarette smoking are also documented (4). For illicit drugs, data are more difficult to obtain. Major increases in injecting drug use, which carries the highest health risks, are recorded: opiate injecting in eastern European countries and south and South-East Asia, and amphetamine injecting in many regions (W5).

Research on social and environmental factors contributing to such increases has been less extensive in the developing world, but indicators and case studies (6, 7) direct attention to urbanization, poverty, migration, technological change, educational deficits, and vested interests in marketing substances (W8).

In Asia, Africa and Latin America, urban populations increased from 16% to 50% of the total. “Increased stressors and adverse events, such as overcrowded and polluted environments, poverty and dependence on a cash economy, high levels of violence and reduced social support” (9) have deleterious consequences for mental health in general and substance use problems in particular, increasing the risk of heavy drinking. Half of the urban populations in low- and middle-income countries live in poverty, and tens of millions are homeless; 77% of Brazilian street children drink heavily. Associated with poverty are unemployment, low education and deprivation, all contributing to higher prevalences

of substance use disorders. In countries without organized social welfare agencies, the disruption of social networks is especially harmful. Migration often results in unemployment and difficult living conditions with increased social stress, worsened by a lack of social support.

While substance misuse can contribute to social disintegration, it is also clear that social deprivation invites substance use to alleviate emotional stress, thus perpetuating a vicious circle. Instrumental stimulant use to relieve stress is reported from Africa, Latin America, South-East Asia, and eastern Europe (10). Depression, anxiety and boredom also invite substance use as a kind of self-medication. Organized crime increases illicit drug supplies for high profit. Aggressive marketing of alcohol and tobacco increases the risks of problematic use, especially among young people. Entertainment and popular music industries propagate Western role models including substance use. Alcohol use by adolescents is recognized to be mainly a social act (W11).

The impact of all these factors on public health and on society at large is considerable. In many countries, however, other risk factors for mortality and morbidity are still prevalent and determine the priorities for improvements: for example, tobacco ranks ninth in developing countries with high mortality and third in those with low mortality (4). Nevertheless, in developing countries, tobacco and alcohol use each account for 0.5–16% of the burden of disease measured in disability-adjusted life years. Alcohol consumption is causally related to over 60 types of disease and injury. Injecting illicit drugs has a high risk of acquiring and transmitting human immunodeficiency virus (HIV) and hepatitis C. The HIV epidemic is primarily driven by injecting drug use in parts of China, India, Thailand and Viet Nam (W12), and also in some countries of the former Soviet Union, with serious consequences for the health system and the economy.

In addition to cost-effective treatments, major efforts will be needed in prevention of substance dependence, focusing on the social risk factors and also on early identification of hazardous use and interventions before dependence develops. This task cannot be shouldered by health services alone; it needs concerted action especially at the community level, close coordination with social services, self-help activities and opinion leaders. Harm reduction strategies, such as replacing dangerous drugs by controllable substitutes in a therapeutic framework, are indispensable for an overall reduction of substance use problems. Application of effective strategies will lessen the risks of blood-borne infections in drug injectors and reduce the burden of alcohol-related road accidents and injuries. High-level political support is crucial. ■

## References

(References prefixed “W” appear in the web version only, available from [www.who.int/bulletin](http://www.who.int/bulletin))

- Room R, Jernigan D, Carlini-Marlatt B, Gureye O, Mäkelä K, Marshall M, et al. *Alcohol in developing societies: a public health approach*. Geneva: Finnish Foundation for Alcohol Studies in collaboration with World Health Organization; 2002.
- The world health report 2002 – Reducing risks to health, promoting healthy life*. Geneva: World Health Organization; 2002.
- Riley L, Marshall M. *Alcohol and public health in eight developing countries*. Geneva: World Health Organization; 1999.
- Demers A, Room R, Bourgault C, editors. *Surveys of drinking patterns and problems in seven developing countries*. Geneva: World Health Organization; 2001.
- Desjarlais R, Eisenberg L, Good B, Kleinman A. *World mental health: problems and priorities in low-income countries*. Oxford: Oxford University Press; 1995.
- Epidemiology and social context of amphetamine-type stimulant use. In: *Amphetamine-type stimulants*. Geneva: World Health Organization; 1997.

<sup>1</sup> Addiction Research Institute, Konradstrasse 32, CH-8005 Zurich, Switzerland (email: [ambros.uchtenhagen@isf.unizh.ch](mailto:ambros.uchtenhagen@isf.unizh.ch)). Ref. No. 04-016212

- W1. *The world health report 1998 – Life in the 21st century*. Geneva: World Health Organization; 1998.
2. Room R, Jernigan D, Carlini-Marlatt B, Gureye O, Mäkelä K, Marshall M, et al. *Alcohol in developing societies: a public health approach*. Geneva: Finnish Foundation for Alcohol Studies in collaboration with World Health Organization; 2002.
- W3. *Global status report on alcohol*. Geneva: World Health Organization; 1999.
4. *The world health report 2002 – Reducing risks to health, promoting healthy life*. Geneva: World Health Organization; 2002.
- W5. *Global illicit drug trends*. Vienna: United Nations Drug Control Programme; 2000:
6. Riley L, Marshall M. *Alcohol and public health in eight developing countries*. Geneva: World Health Organization; 1999.
7. Demers A, Room R, Bourgault C, editors. *Surveys of drinking patterns and problems in seven developing countries*. Geneva: World Health Organization; 2001.
- W8. *The world health report 2001 – Mental health: new understanding, new hope*. Geneva: World Health Organization; 2001
9. Desjarlais R, Eisenberg L, Good B, Kleinman A. *World mental health: problems and priorities in low-income countries*. Oxford: Oxford University Press; 1995.
10. Epidemiology and social context of amphetamine-type stimulant use. In : *Amphetamine-type stimulants*. Geneva: World Health Organization; 1997.
- W11. Room R. Adolescent drinking as collective behaviour and performance. In: Zucker R, Boyd G, Howard J, editors. *The development of alcohol problems: exploring the biopsychosocial matrix of risk*. Rockville (MD): National Institute on Alcohol Abuse and Alcoholism; 1994. NIAAA Research Monograph 26. p. 205-8.
- W12. Steinbrook R. The AIDS epidemic in 2004. *New England Journal of Medicine* 2004;351:115-7.