Chapter 7

The Urban Environment, Drug Use, and Health

Danielle Ompad and Crystal Fuller

“The heroin habit is essentially a matter of city life . . .”


1.0. INTRODUCTION

Drug use incorporates a wide variety of drugs, including licit (i.e. tobacco and alcohol) and illicit drugs (e.g. marijuana, hallucinogens, cocaine, heroin, etc.). Both licit and illicit drugs result in substantial morbidity and mortality despite concerted efforts aimed at minimizing or preventing the use of these drugs. Drug use results in significant societal economic costs; addiction costs the U.S. approximately $400 billion in health care costs, lost worker productivity, and crime (McGinnis and Foege, 1999).

In 2000, most (80.3%) U.S. residents lived in metropolitan areas (U.S. Census Bureau, 2000) and most studies of drug abuse have been conducted in urban areas. Thus, our current understanding of drug abuse reflects primarily an urban perspective and historically, drug use has been conceptualized as an urban problem (Bailey, 1916; Hunt and Chambers, 1976; Kleber, 1994; Storr, et al., 2004). While there has been some focus in the literature on illicit drug use in rural areas (National Institute on Drug Abuse, 1997; Sarkar, et al., 1997), in this chapter we will focus on use of illicit drugs and its contextual determinants in urban settings. We will work from the theoretical framework proposed by Galea, Ahern and Vlahov (Galea, et al., 2003) where the social and physical environment, along with structural considerations such as availability of social services, municipal structures and national and international policies (e.g. the “War on Drugs”), will be considered. We will examine the occurrence of drug use and its associated morbidity and mortality within the context of multiple levels of influence including
individual, network, and neighborhood influences. This chapter begins with a review of the epidemiology of drug use in which we focus on the prevalence and incidence of drug use within and between cities. We will then discuss key characteristics of the urban environment that are associated with drug use in urban settings, and consider the medical consequences of drug use and the extent to which the urban environment can affect these outcomes. Finally, we will highlight effective prevention and treatment programs that have been implemented in urban areas.

2.0. DRUG USE EPIDEMIOLOGY

Before examining the role of the urban environment in the occurrence and consequences of drug use, we begin with a brief overview of the epidemiology of drug use. In the U.S., there are a number of surveillance and survey efforts to estimate prevalence of drug use. Two important sources include the National Survey on Drug Use and Health (NSDUH) and Monitoring the Future (MTF); both are based on probability samples of U.S. residents outside of institutions (including correctional facilities) and thus likely represent conservative estimates. Furthermore, as the majority of Americans live in urban areas, findings from these studies may approximate the current situation in U.S. urban areas.

2.1. Prevalence

According to the 2002 NSDUH, approximately 108 million persons over age 12 had used an illicit drug in their lifetime and in the U.S. 35.1 million had used an illicit drug in the past year (Substance Abuse and Mental Health Services Administration and Office of Applied Studies, 2003b). The most frequently reported illicit drug used was marijuana (40.4% reported lifetime use, 11.0% past year use). In terms of lifetime use, cocaine and hallucinogens were also quite prevalent (14.4% and 14.6%, respectively), while amphetamines (9.0%) and heroin (1.6%) were less so.

In 2003, drug use was especially prevalent among adolescents. According to 2003 estimates from the MTF Study, a study of public and private high school and middle school students in the U.S., 51.1% of high school seniors had used an illicit drug in their lifetime and 39.3% had used an illicit drug in the last year (Johnston, et al., 2004). In terms of lifetime use, the most commonly reported illicit drug was marijuana (46.1%), followed by amphetamines (14.4%), narcotics other than heroin (13.2%; i.e., oxycontin, percocet, vicodin, etc.), inhalants (11.2%) and hallucinogens (10.6%).

Drug use is a global phenomenon. The United Nations Office on Drugs and Crime provides estimates of annual prevalence of drug use among individuals aged 15 and older in countries that have estimates available (United Nations and Office on Drugs and Crime, 2003). For example, the annual prevalence of marijuana use in Central and South America ranges between 0.1% in Belize to 9.2% in El Salvador as compared to 9.3% in the U.S. Marijuana prevalence in African countries range from 0.01% in Cote d’Ivoire to 21.5% in Ghana; and the highest prevalence estimates are from Papua New Guinea and the Federated States of Micronesia (29.5% and 29.1%, respectively). These estimates illustrate both the enormous variability in drug use from country to country and the global burden of drug use.