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Illicit drug use research in Latin America: Epidemiology, service use, and HIV

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Abstract

The purpose of this article is to review the research status of illicit drug use and its data sources in Latin America, with particular attention to the research that has been produced in the past 15 years in epidemiology of illicit drug use, services utilization, and relationship between HIV and drug use. This article complements the series of articles that are published in this same volume which examine drug abuse research (epidemiology, prevention, and treatment) and HIV prevention in Latinos residing in the United States. This review resulted from extensive international and national searches using the following databases: Current Contents Connect, Social and Behavioral Sciences; EBSCO; EMBASE(R) Psychiatry; Evidence Based Medicine (through OVID); Medline, Neurosciences, PsychINFO, Pubmed, BIREME/PAHO/WHO—Virtual Health Library, and SciELO. Papers selected for further review included those published in Spanish, English, and Portuguese in peer-reviewed journals. From the evidence reviewed, it was found that the published research literature is heavily concentrated on descriptive epidemiologic surveys, providing primarily prevalence rates and general information on associated factors. Evidence on patterns of service delivery and HIV prevention and treatment is limited. The cumulative scope of this research clearly indicates variability in quantity and quality of research across Latin American nations and the need for greater uniformity in data collection elements, methodologies, and the creation of international collaborative research networks.

Keywords: Illicit drug use research; Data sources; Latin America and the Caribbean; Epidemiology; Service utilization; HIV

1. Introduction

The purpose of this article is to review the research status of illicit drug use in Latin America, with particular attention to epidemiology of drug use, services utilization, and relationship between HIV and drug use. In this article, we provide an overview of the sociodemographic and economic status of Latin America, review available data on epidemiology of drug use, treatment services utilization of drug users, and HIV and drug use, discuss Latin American research trends within the context of relevant U.S. data, and identify research parallels within Latin America and the United States as well as overlapping areas of need in order to increase and improve international research collaboration.

2. Overview of the Latin America and the Caribbean region

The Latin American and Caribbean region include countries dispersed among the Southern part of North America (Mexico), Central America (Belize, Guatemala, Honduras,

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El Salvador, Nicaragua, Costa Rica, and Panama), South America (Venezuela, Colombia, Ecuador, Peru, Bolivia, Chile, Argentina, Uruguay, Paraguay, Brazil, Suriname, French Guiana, and Guyana), and the Caribbean (Cuba, Jamaica, Haiti, Dominican Republic, Puerto Rico, and other smaller islands), with Brazil and Mexico being the two largest of these countries.[6] The overall population in Latin America is estimated to be approximately 563 million, 120 million more than in 1990, with an annual population growth rate of 1.6%. There are important variations in population growth across countries, from below 1% per year in Cuba, Uruguay, Chile and most of the Caribbean countries, to over 2% in Guatemala, Paraguay and Honduras (UNDP, 2004). Life expectancy rates also vary considerably across countries, ranging from a high of 78 years of age in Costa Rica and 76 in Chile, to a low of 63 years of age in Bolivia (PAHO, 2002). Seventy-five percent of the population lives in cities, with Catholicism being the prevailing religion, though there is a strong influence of indigenous beliefs and more recently, an increase of Christian–Protestant religions.

In regards to income equality, Latin America is the least equitable region in the world. This discrepancy in income equality is measured as the difference between the richest and poorest (the highest and lowest 20% of total income distribution) individuals. The gap between the rich and the poor is high in all countries with some income ratio variations. In the region's urban areas, female headed households account for a higher percentage of extremely poor households than male headed households. The share of total extremely poor households that were headed by women rose in many countries, a trend known as feminization of poverty. Additionally over 43% of women over the age of 15 had no income of their own, whereas the rates was only 22% for men who were in that position, and 61% of women lived in poor households. The extreme poverty rates (those whose income is less than US$ 1 per day as measured by the World Bank) are higher for children than for any other group, 41 million children between 0 and 12 years of age and 15 million between the ages of 13 and 19 are living in extreme poverty. Indigenous people which number between 28 and 45 million (Hall and Patrinos, 2005) account for over 25% of the population in Bolivia, Ecuador, Guatemala and Peru; Afro-descendants, who account for more than 90% of the population in Haiti and a quarter of the population in Brazil, Nicaragua and Panama, are to a large extent, the poorest in the region and receive scant access to decision making levels (UNDP, 2004). Indigenous people evidence worse socioeconomic conditions (lower access to education health services, and employment) than their non-indigenous counterparts. Even when regional socioeconomic improvements are noted within the Latin American region, these improvements are not evident within the indigenous populations (Hall and Patrinos, 2005).

The purpose of this paper is to review and summarize the status of illicit drug abuse research in Latin America focusing on published reports in peer-reviewed journals, with particular attention to epidemiology of drug use, treatment service utilization for drug users, and HIV and drug use. Though recognizing the importance of the problems posed by tobacco and alcohol consumption, these were not the primary areas of emphasis for this review. We focus on the main lines of inquiry by region, point out both opportunities and challenges for improving the quality and quantity of research across the regions, and offer recommendations for cross-national collaborative efforts.

3. Methods

In order to provide the most accurate picture on the status of the epidemiology of drug abuse research, patterns of service utilization, and HIV and drug abuse, a comprehensive literature review was conducted for the period from 1990 through 2005 using the following databases: Current Contents Connect, Social and Behavioral Sciences; EBSCO; EMBASE(R) Psychiatry; Evidence Based Medicine (through OVID); Medline, Neurosciences, PsychINFO, Pubmed, BIREME/PAHO/WHO—Virtual Health Library, and SciELO. Information was also gathered from local and regional documentation Centers and web pages. The most useful sources for articles not included in the international literature is PAHO (http://www.scielo.org/) and CICAD's (2006)[7] web page on drug observatories http://www.cicad.oas.org/oid/MainPage/Observatorios/ObservatoriosNacionales.htm.

An initial challenge within this review involved the lack of uniformity in the definition of drug use which affects the measurement of its etiology, prevalence, and its reporting. Given this limitation, the literature search was conducted using the key terms "drugs" and Latin America and the Caribbean along with names of countries in the region, in addition to a variety of other key words including epidemiology of drug abuse, use, patterns of use, abuse, addictions, disease, mental health, comorbidity, HIV, personality problems, antisocial behavior, associated problems, violence, suicide; adolescents, children; intervention, prevention, treatment, service utilization, psychotherapy, pharmacotherapy, rehabilitation; surveys, epidemiology, prevalence, availability; legislation, social networks, and health services. Specific searches by name of authors were also conducted. Papers selected for further review included those published in Spanish, English, and Portuguese in peer-reviewed journals primarily from the Region of the Americas. Care was taken to eliminate repetition between sources and reviews of literature were not considered, that is, only articles with original data were included. The information gathered was analysed by drug type (illegal drugs that included illicit use of psychotropic drugs and narcotics) and by country according to the following categories: methodological issues, general population surveys, school surveys, special population studies, estimates related to the extent of the problem in the justice system, and trends for patients receiving treatment in general and specialized centers, characteristics of substance abusers, life styles, etiology, consequences, comorbidity with mental problems, substance abuse as a risk factor for other diseases, health systems, and policy research.

It is important to note that the literature search may be skewed towards countries that publish more extensively in the internationally indexed journals and to those where local information centers were more accessible to the authors of this paper, notably Mexico and Brazil.

4. Epidemiology of drug use

Epidemiology can be defined as the study of the distribution of diseases or disorders in populations and the factors which influence that distribution. Epidemiology describes the occurrences of disorders, identifies factors which are associated with the onset of specific disorders, and intervenes in the risk factors that produce the disorders in order to reduce their incidence

[6] Bolivia: http://sinaltid.rree.gov.bo/sinaltid/Estudi20Prevalencia%202004.pdf; Chile: http://www.conacedrogas.cl/inicio/pdf/Drogas_Nivel_Ingresos_PobGral_2004.pdf; Colombia: http://odc.dne.gov.co/publicaciones/PUBLICACION_64.pdf; México: http://www.conadic.gob.mx/doctos/ena2002/ENA02-O.pdf.

[7] http://www.cicad.oas.org/.