NAE

Narcotics Awareness and Education

DRUG PREVALENCE
IN LATIN AMERICAN AND
CARIBBEAN COUNTRIES

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Hongsook Eu, Ph.D.**

September, 1993

The Narcotics Awareness and Education (NAE) Project is designed to strengthen the capabilities of Lesser Developed Country (LDC) institutions to design, implement and evaluate effective drug awareness and prevention programs. The project focuses on drug demand reduction through public awareness and education. Key to the overall project strategy are activities that: generate an understanding of the nature and extent of drug abuse in a given country; develop public awareness of the problem among government policy makers, opinion leaders and the general public and of the importance of implementing comprehensive prevention programs before the drug problem gets out of hand; and assist in obtaining the support of key national leaders and institutions to develop and effectively implement national prevention strategies. Among the technical support services involved in the project strategy are technical assistance, training, research, information dissemination, and policy dialogue.

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1. INTRODUCTION

Over the past half dozen years, a considerable effort has been underway to measure the nature and extent of alcohol and other drug use in Latin American and Caribbean countries. This effort has used both household-based and school-based surveys, many at a national level. Individual studies have been reported through a variety of publications, but no cross-national analysis of the full range of these studies has been presented to date. This paper analyzes data from these studies in a comparative framework in a search for overall patterns of use throughout the region which may, in turn, help to guide our understanding of the nature of the drug use problem in the region.

Thus, this is a first attempt at a cross-national, cross-cultural, and cross developmental view of drug use patterns in Latin America and the Caribbean. The ten countries represented in this study are drawn from a cross-section of countries in the region:

- Guatemala (Central American),
- Panama (Central American),
- The Dominican Republic (Caribbean),
- Ecuador (South American),
- Colombia (South American),
- Peru (South American),
- Paraguay (South American),
- Bolivia (South American),
- Jamaica (Caribbean), and
- Haiti (Caribbean).

The objective of this analysis is to determine what drugs are most likely to be used and what segments of the population are using them. Variables of gender, locality, age group, age at first use, and prevalence of use are considered. Prevalence is understood to refer to the extent of use of a given substance in a given time frame.

The drugs reviewed are the licit substances of tobacco, alcohol, and pharmaceuticals, and the illicit substances of marijuana, cocaine, cocaine paste, crack, and the set of licit substances used illicitly as inhalants. Where possible, the linkage between and among these substances is correlated. Finally, conclusions are drawn from the data regarding the nature and extent of the problem within the region.

The Data for This Study

This analysis uses 11 recent drug prevalence surveys of Latin American and Caribbean countries. The primary data sources are seven national drug prevalence and attitude surveys undertaken by Development Associates in collaboration with local agencies and organizations under the Narcotics Awareness and Education Project (NAE) and predecessor projects of the United States Agency for International Development (AID). These surveys are:

- <u>Survey on Drug Prevalence and Attitudes in the Dominican Republic</u> (1992),

- <u>National Study of Drug Prevalence and Attitudes towards Drug Use in Haiti</u> (1990),

- <u>Drug Awareness Needs Assessment for Guatemala</u> (1990),

- <u>Survey on Drug Prevalence and Attitudes in Urban Panama</u> (1991),

- <u>The Epidemiology of Drug and Alcohol Abuse in Paraguay</u> (1991),

- <u>Drug Use and Abuse in Peru: An Epidemiological Investigation of Drugs in Urban Peru</u> (1986), and

- <u>La Prevalencia del Uso Indebido de Drogas en Bolivia (Población Urbana)</u> (1993).

Other surveys used are:

- <u>Estudio Nacional Sobre Alcoholismo y Consumo de Substancias que Producen Dependencia: Colombia</u> (Torres and Murrelle, 1987),

- <u>El Consumo de Drogas en El Ecuador</u> (Fundación Nuestros Jóvenes, 1989),

- <u>National Survey on the Use of Drugs in Jamaica</u> (Stone, 1990) and

- <u>Uso de Drogas en las Ciudades del Perú: Encuesta de Hogares</u> (Center of Information and Education for the Prevention of Drug Abuse, 1988).[1]

We had direct access to the data sets for the surveys undertaken in Guatemala, Panama, the Dominican Republic, Haiti, and Paraguay. For the other studies, it was necessary to rely on the written reports of the data, which limited flexibility in re-analyzing data.

Table 1 presents the sample characteristics of the 11 surveys. The surveys conducted in the Dominican Republic, Guatemala, Peru(1984), Paraguay and Haiti interviewed urban residents ages 12-45, while the 1988 Peru survey and the Bolivia survey interviewed urban

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[1] The surveys in Ecuador, Jamaica, and Peru(1988) were supported by AID. Development Associates provided technical assistance in the design of the Peru survey, which used an instrument derived from the instrument used in the 1986 survey. The seven Development Associates/NAE/AID studies used comparable questions as did the CEDRO/Peru study of 1988. The Ecuador survey was also comparable in terms of instrument and design because many of its variables were derived from the 1986 Peru study.

residents ages 12-50. The universe sampled in Ecuador was persons 10 years and older; in the Jamaica survey, it was persons 15 years and older. The Ecuador and Jamaica surveys drew their samples from both urban and rural areas.

The Substances

The substances analyzed in this study are the psychoactive substances of tobacco, alcohol, marijuana, cocaine[2], crack, cocaine paste, inhalants, and pharmaceuticals. These substances constitute the set of substances that are covered in most of the surveys, that have the highest prevalence rates overall, and that generally are of the greatest concern to policy makers in the field of drug prevention. Table 2 shows prevalence measures of the substances from the surveys. The six NAE surveys and the 1988 Peru survey provide both lifetime and 30-day prevalence for most substances studied, while the surveys in Colombia, Ecuador, and Jamaica present only lifetime prevalence for a limited number of substances (e.g., marijuana, cocaine, alcohol, and tobacco).

Drug prevalence is indicated by two basic measures: lifetime prevalence--the proportion of the sample population that has used a given substance at least once in their life; and current or 30-day prevalence--the proportion that has used a given substance in the last month. Lifetime and 30-day prevalence are essential indicators of the nature and extent of drug use which allow controlled comparisons between substances and across national populations at the broadest level. Current prevalence also indicates the intensity of the drug problem at a given time. No attempt was made to include data regarding frequency of use, which were available in many of the surveys. Such data are less likely to be reliable than data regarding lifetime and 30-day prevalence. They also are more difficult to interpret.

Limitations in the Data Sets

All the surveys were not conducted during the same time period. The earliest survey took place in 1986 (the first Peru study) and the latest in 1993 (the Bolivia study). Drug prevalence patterns are not static; there may be changes in those patterns over time. However, we have no alternative but to use the data available because, in most countries, only a single scientifically valid survey has been undertaken and published to date.

Many of the studies were conducted by different teams of researchers. Teams had different strategies in designing the studies, conducting the surveys and analyzing the results.

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[2]. The term cocaine is used for cocaine hydrochloride, cocaine paste for crude cocaine base known in Latin America as "pasta basica" or "bazuco" and crack for cocaine base recovered from cocaine hydrochloride. Other forms of cocaine use such as coca tea or chewed leaves are not considered in this study.

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As a consequence, there is some variation in the data that can be attributed to design and implementation differences. For example, the lifetime prevalence of marijuana in Peru in 1986 is higher than in 1988. While a decrease of lifetime prevalence in the underlying universe is not possible unless a large proportion of marijuana users in 1986 subsequently died or moved to rural areas or out of the country, a decrease in the estimates from the population sampled might result from differences in sampling procedures, fieldwork techniques, and data presentation in the two surveys. These design and field work differences do not detract from the overall reliability of the data as reasonable estimates of the extent of drug use in Peru and elsewhere in the region.

In the section that follows, we analyze the components of each data set. In the final section, we draw conclusions regarding the nature and extent of drug use in the region and its possible implications for prevention.

Table 1
Sample Characteristics

	Size	Age	Locality	Definition of Urban
NAE Surveys				
Dominican Republic 1992	3,015	12 - 45	Urban	20,000 or greater
Haiti 1990	2,100	12 - 45	Urban	Port-au-Prince, Cap-Haitien, and other cities[3]
Guatemala 1990	1,807	12 - 45	Urban	Guatemala City, Quezaltenango and Escuintla
Panama 1991	911	12 - 45	Urban	Panama City, San Miguelito and Colon
Paraguay 1991	2,484	12 - 45	Urban	20,000 or greater
Peru 1986	5,000	12 - 45	Urban	25,000 or greater (some cities in the universe were excluded)[4]
Bolivia 1993	6,000	12 - 50	Urban	30,000 or greater
Other Surveys				
Colombia 1987	2,800	12 - 64	Urban	Not clearly defined by population size[5]
Ecuador 1989	6,147	10 - 65	Urban/Rural	
Jamaica 1986	5,000	15 +	Urban/Rural	
Peru 1988	6,761	12 - 50	Urban	25,000 or greater

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[3]. Other cities are Port-de-Paix, Gonaives, Hinche, Jacmel, Les Cayes, Jeremie, St-Marc and Miragoane-Petit Goave.

[4]. The city of Tingo Maria and all cities in Ayacucho, Apurimac and Huancavelica were excluded for security reasons.

[5]. The text of the study refers to principal cities, intermediate cities and towns.

Table 2
Substances Covered by Surveys[6]

	NAE Surveys															Other Surveys							
	Dom. Rep. 1992		Haiti 1990		Guatemala 1990		Panama 1991		Paraguay 1991		Peru 1986		Bolivia 1993		Colombia 1987		Ecuador 1989		Jamaica 1986		Peru 1988	
Substances/ Prevalence Measures	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days	Life-time	30 days
ILLICIT DRUGS																						
Marijuana	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓
Cocaine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓
Crack	✓	✓	✓	✓			✓	✓														
Cocaine Paste (Bazuco)							✓	✓			✓	✓	✓	✓	✓						✓	✓
Inhalants	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓			✓				✓	✓
PHARMACEU-TICALS	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓*								
ALCOHOL	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓		✓		✓	✓
TOBACCO	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓		✓		✓		✓	✓

* Excludes Stimulants

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[6]. Certain surveys such as the Paraguay survey included substances or prevalence data in a form that did not permit the kind of cross-national analysis undertaken in this study.

2. RESULTS

In this section, we will examine prevalence patterns for the countries included in the study. We will look at those prevalence patterns by substance in terms of such factors as difference in gender, age and age of first use.

A. Alcohol

Alcohol is the most commonly used substance in this set of Latin American and Caribbean countries. As Figure 1 shows, Peru has the highest lifetime alcohol prevalence in the region: 87% of urban residents surveyed in Peru had used alcohol at some time in their lives. Paraguay, Panama and Ecuador have the next highest alcohol prevalence levels, at 79.5%, 79.4% and 75.7%, respectively. Jamaica has the lowest lifetime prevalence at 33% according to the data in that national study, although this appears to be a case of under-reporting. Figure 1 also shows the high level of current alcohol use among lifetime alcohol consumers. In Peru, Bolivia and the Dominican Republic, more than half of the persons who ever used alcohol are current alcohol consumers. Haiti represents an exception to this pattern, however, where only 10% of lifetime users reported having consumed in the past month.

Figure 2 presents the gender difference in alcohol consumption. The figure shows a consistent difference across countries: men have higher lifetime and 30-day prevalence than women. The difference in lifetime prevalence between men and women is greatest among Jamaicans: men were more than twice as likely to consume alcohol as women (45% of men and 21% of women). With regard to 30-day prevalence, men are considerably more likely than women to have recently consumed alcohol in most countries, including Bolivia, Peru, Panama, the Dominican Republic and Guatemala. In Haiti, on the other hand, where current prevalence is lowest, the difference between men and women is very small (7% of men and 5% of women).

Figure 3 shows alcohol prevalence by geographic locality. There is no consistent pattern of alcohol consumption across localities in this set of Latin American and Caribbean countries. For example, large cities in the Dominican Republic and Peru have higher lifetime alcohol prevalence than small cities, while tourist and rural areas in Jamaica have higher lifetime alcohol consumption than the metropolitan area (Kingston).

Figure 4 presents alcohol prevalence among different age groups. In most countries, older persons have higher lifetime and current alcohol prevalence than younger persons. This pattern is more clear in Peru and Guatemala than other countries. However, in the Dominican Republic, Haiti and Panama, except for the youngest age group, differentials by age groups are not substantial, indicating that alcohol has been tried and is used by all age groups except the very young. Current alcohol prevalence is very similar to the lifetime prevalence patterns described above, except in Haiti. Here, although there are no substantial lifetime alcohol prevalence differentials by age groups, current prevalence clearly indicates that older Haitians are more likely to have recently consumed alcohol than younger persons.

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Age at first use of a given substance is an important indicator in designing a drug prevention strategy, because it defines the youngest population at risk of use and provides insight into the sequence in which initiation into use takes place. As Figure 5 indicates, among persons in this set of Latin American and Caribbean countries who have tried alcohol, more than 20% in every country did so before their fifteenth birthday, ranging from 22% in Guatemala to 39% in the Dominican Republic. Moreover, more than 70% in each country who have tried alcohol initiated use as teenagers, ranging from 72.5% in Haiti to 98% in the Dominican Republic.

A comparison of lifetime prevalence (Figure 4) and age at first use (Figure 5) reveals further insights. The pattern of alcohol prevalence across the two figures shows a similar early first use, but fairly flat lifetime prevalence levels across age categories, suggesting a fairly stable pattern of alcohol use by youth over the years.

In sum, as in the United States, alcohol is the most commonly used substance in this set of Latin American and Caribbean countries, due to its ready availability, social acceptability, and cost. Men are more likely than women to have consumed alcohol in their lifetime and in the past month. With respect to differentials among age groups, in most countries older persons are more likely than younger persons to have consumed alcohol in their lifetime and in the past month. Alcohol use is fairly evenly distributed by geographic location among the Latin American and Caribbean countries in the study.

B. Tobacco

Tobacco is the second most commonly used substance in this set of Latin American and Caribbean countries. As with alcohol, Figure 6 shows that Peru has the highest lifetime tobacco prevalence among the countries, at 67% in 1986 and 57% in 1988. Ecuador and Colombia have the next highest lifetime tobacco prevalence, at 56% and 50%, respectively. The Dominican Republic has the lowest lifetime prevalence at 21%. Comparing current tobacco prevalence to lifetime prevalence, the figure indicates, as with alcohol, a high proportion of current tobacco use among lifetime smokers. Although it has the lowest lifetime tobacco prevalence, the Dominican Republic has the highest proportion of lifetime users who are current users: 73% of lifetime tobacco users are current smokers, suggesting a high addiction rate, or a recently increased use of tobacco in the Dominican Republic.

Figure 7 shows differential tobacco prevalence by gender. As in the case of alcohol use, men have higher lifetime and current prevalence than women across countries. Where current tobacco use is high, as in Peru, Bolivia and Panama, differences between men and women are large. Differentials between men and women are greater in tobacco use than in alcohol use in most countries, except Haiti and the Dominican Republic.

With regard to tobacco use differentials by locality, Figure 8 shows that persons in large cities are more likely to have smoked in their lifetime than persons in small cities or rural areas, although these differences are not substantial in some countries. For example, in Haiti, Cap-

Haitien -- the second largest city -- shows lower lifetime tobacco prevalence than other small cities. With regard to current use, there are no substantial differences among localities except in Peru, where Lima, the largest metropolitan area, has higher prevalence than the cities in the provinces.

Figure 9 reveals that older groups are more likely to have ever used tobacco than younger groups in Panama, Guatemala, Haiti and the Dominican Republic. On the other hand, in Peru, persons 19-29 are more likely to have ever smoked than younger and older persons. Age patterns are similar for lifetime and current use in each country.

Figure 10 shows percentages of lifetime users of tobacco by age at first use. The figure presents a similar finding as with alcohol. In every country, at least 19% of persons who had ever smoked initiated use before they reached age fifteen, ranging from 19% in Haiti to 35% in the Dominican Republic. Furthermore, most lifetime smokers were introduced to tobacco as teenagers, ranging from 64% in Haiti to 79% in Guatemala and Panama.

As suggested by low lifetime tobacco use among persons aged 12-14 at the time of the survey and the high proportion of smokers who initiated use at 12-14 (See Figure 9 and 10) in Panama, Guatemala, Haiti and the Dominican Republic, the use of tobacco is substantially less popular among younger age cohorts than it is for older age cohorts.

In sum, tobacco prevalence is moderately lower than alcohol prevalence in the Latin American and Caribbean countries, but is high nevertheless. Men are more likely than women to have smoked in their lifetime and in the past month. Residents in larger cities are more likely than those in smaller urban or rural areas to have smoked at some time in their lives. Older persons are more likely to have smoked than younger persons, and over two-thirds of smokers started the use as teenagers.

Smoking and drinking have been observed as linked behaviors for a long time in the United States. Previous studies show a positive relationship not only between drinking and smoking, but also between the amounts of drinking and smoking, regardless of the particular population under consideration. While the connection between the two behaviors in the general population may be modest but significant, with heavier users of either substance, the relationship appears both strong and reliable (Bien and Burge, 1990). It is likely that a similar link exists between smoking and drinking in the set of Latin American and Caribbean countries.

As a first step toward exploring this issue, comparing lifetime prevalence of alcohol and tobacco use for three of the countries we are studying, Guatemala, Panama and the Dominican Republic, we can see a strong linkage between alcohol and tobacco use. Among those who have ever used tobacco, 88% of those surveyed in Guatemala have used alcohol, 96% in Panama and

80% in the Dominican Republic.[7]

In the next section, we shall explore the relationship between smoking tobacco and use of marijuana.

C. Marijuana

Marijuana is the most commonly used illicit substance in the set of Latin American and Caribbean countries studied. Figure 11 presents lifetime and current prevalence of marijuana. It shows that Jamaica has by far the highest lifetime prevalence at 28.5%. In other countries, less than 10% of respondents had used marijuana. Lifetime prevalence levels are similar in most of these countries: In Guatemala, Colombia, Panama and Peru, marijuana prevalence is 7.3%, 6.5%, 6.1% and 8.3%, respectively. Paraguay has the lowest lifetime prevalence at 1.4%, followed by the Dominican Republic at 2.0%.

With respect to current use of marijuana, Guatemala shows the highest prevalence at 2.9% and also has the highest proportion of current marijuana use among lifetime marijuana users, at about 40%. Panama and Haiti have the next highest current marijuana prevalence, at 1.5% and 1%, respectively.

As Figure 12 shows, gender differentials are greater for marijuana use than for alcohol and tobacco use, despite the lower overall prevalence of marijuana. In all countries except Haiti, men are far more likely than women to have ever used and to currently use marijuana. The difference in lifetime marijuana use between men and women ranges from 29% in Jamaica to 2.3% in Paraguay. Gender differentials appears to be much smaller for current use than lifetime use of marijuana.

Figure 13 presents marijuana use by geographic locality. The figure shows that, in every country, the largest cities have the highest lifetime marijuana use. However, in Panama, Haiti and the Dominican Republic, the second largest cities have lower lifetime prevalence than other smaller cities. With regard to current prevalence, there is no consistent pattern in localities.

Unlike alcohol and tobacco, marijuana is more commonly used by youth and young adults than either the very young or the oldest group covered in these studies. As Figure 14 indicates, in Guatemala, Panama and Haiti, lifetime marijuana prevalence increases steadily by age up to the 30-34 age group and declines substantially in the 40-45 age group. Lifetime prevalence is highest among age groups between 25 and 39. In Jamaica and the Dominican

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[7]. Chi squares for the respective crosstabs are for Guatemala, 354.6 with one degree of freedom and an N of 1807, Panama, 105.7 with one degree of freedom and an N of 913 and the Dominican Republic, 101.4 with one degree of freedom and an N of 3016.

Republic, the oldest age group, 40 years and older, has higher lifetime prevalence than the same age group in other countries. With regard to current prevalence, the 20-29 age group is more likely than other age groups to have used marijuana in the last 30 days. However, in Guatemala and Haiti, persons ages 35-39 are more likely to have used marijuana than younger or older persons.

Figure 15 shows percentages of lifetime marijuana users by age at first use. We note that where lifetime prevalence is high, as in Guatemala and Panama, more than 20% of lifetime users had tried marijuana before they reached fifteen and most lifetime users had tried marijuana as teenagers (77% in Guatemala and 84% in Panama). Where lifetime prevalence is low, as in Haiti and the Dominican Republic, the percentage of lifetime users who had tried marijuana as teenagers is considerably lower (40% in Haiti and 48% in the Dominican Republic), and a high proportion of lifetime users had initiated use during their twenties (56% in Haiti and 45% in the Dominican Republic).

A comparison of Figures 14 and 15 shows contrast among the high and low prevalence countries. In high prevalence countries such as Guatemala and Panama, introduction to marijuana is as early as it is to alcohol and tobacco, and a substantial proportion of lifetime users currently use the substance. In low prevalence countries such as Haiti and Dominican Republic, marijuana use occurs at a somewhat older age on average than alcohol and tobacco use. In recent years, in those low prevalence countries, marijuana use is becoming more widespread.

Perception of drug availability, family influence, peer influence and early deviant behavior were important determinants of early marijuana use in the United States in the late 1960s and early 1970s (O'Donnell and Clayton, 1979). Likewise, daily use (20+ days per month) has been positively correlated with absenteeism and poor school achievement among high school seniors and negatively correlated with religious involvement and plans for college attendance (Johnston, 1980).

A study of chronic marijuana use in Costa Rica (Carter, 1980) also presents similar findings: Marijuana users in Costa Rica tended to be individuals who came from weakly constituted families, who had absent and/or moralistic mothers, who suffered from disciplinary inconsistencies and/or sibling rivalry, who lived in poverty, and who had begun to have serious problems with major institutions such as schools and the justice system. Marijuana users, like drinkers, had frequently had an early hostility to authority and institutional controls and had abandoned their familial homes at an early age. Peer groups assumed primary importance as a source of behavioral models among individuals who left home.

Using data from three of the countries in the study (Dominican Republic, Guatemala and Panama), we have examined some of the determinants of lifetime marijuana use in our data set[8].

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[8]. We chose these three countries because we had recent complete data sets available. The PROC LOGIST procedure in the SAS Statistical package is used for these analyses.

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The dependent variable is whether the respondent is a lifetime marijuana user or not. The independent variables are lifetime tobacco use, gender, age, locality, education and socioeconomic status.

The lifetime tobacco user has the strongest effect on the likelihood of being a lifetime marijuana user all three countries. Respondents who are lifetime tobacco users are more likely than those who are not to have tried marijuana some time in their lives, by about 11.4 times in Panama, 7.7 times in Guatemala and 6.2 times in the Dominican Republic. While we cannot be sure that tobacco use preceded marijuana use, these results are consistent with previous studies. Kandel and Davies (1991) found that those who use alcohol and tobacco are far more likely to begin using marijuana early and to use it more extensively than those who do not use alcohol or tobacco.

Results regarding gender, age and locality from these analyses are consistent with our earlier findings. In particular, men are several times as likely as women to have used marijuana in each country. In the Dominican Republic and Panama, residents of the largest city and small urban centers are much more likely to have used marijuana than persons in medium-sized cities, while age is significantly related to marijuana use only in Panama, specifically for those ages 25-39. In general, education and socio-economic status are not significantly related to marijuana use once we consider other factors in our model.

D. Cocaine

Cocaine is the third most commonly used illicit substance in the region. Figure 16 shows that Panama has the highest lifetime and current prevalence at 4.4% and 1.7% respectively. Colombia and Peru (in 1986) have the next highest lifetime prevalence levels at 2.1% and 2.6% respectively. Paraguay has the lowest prevalence at 0.3%, followed by 0.8% in Haiti. Current prevalence in the region, except in Panama, is considerably lower than lifetime prevalence (below 0.5% level). Likewise, except for Panama and Peru (1988), Figure 16 shows a low ratio of current cocaine use to lifetime use.

As Figure 17 shows, men are far more likely than women to have used cocaine at some time in their lives. In Panama, men are 3.7 times as likely as women to have used cocaine (7.1 of men and 1.9% of women). The differences between men and women are even more dramatic in other countries (Jamaica, Peru, the Dominican Republic, Haiti, Bolivia and Paraguay). Men are also far more likely than women to have used cocaine in the last month. In Guatemala, however, the difference between men and women is very small (0.4% of men and 0.3% of women), suggesting a recent increase in cocaine use among women, given that men far exceed women in terms of lifetime use.

Figure 18 presents cocaine use by geographic location of the subjects studied. In Jamaica and Peru, the figure clearly shows that metropolitan areas have considerably higher lifetime cocaine prevalence than smaller cities or rural areas. In other countries, there is no consistent pattern of cocaine use by geographic locality. In Panama, Guatemala and the Dominican Republic, the smallest cities in the surveys have the highest lifetime prevalence.

Figure 19 indicates that persons ages 20-35 are more likely than other age groups to have used cocaine at least once in their lives. In all countries, except Guatemala, current prevalence is concentrated in younger age groups, with no current use among persons 40 years and older. In Panama and Haiti, no lifetime use is observed among 12-14 year-olds.

Figure 20 shows the percentage of lifetime cocaine users by age at first use. Compared to marijuana, the proportion of persons who have tried cocaine as teenagers is low. However, the contrast between high and low prevalence countries found with marijuana is also present here. Where lifetime cocaine prevalence is high, the proportion of persons who have tried cocaine as teenagers is higher than where lifetime prevalence is low (42.8% in Panama compared to 15.5% in Haiti). On the other hand, where lifetime cocaine prevalence is low, the proportion of persons who have tried cocaine during their twenties is higher than where lifetime prevalence is high (63.3% in Haiti compared to 55.2% in Panama).

A comparison of Figure 19 and 20 also suggests a similar contrast found with marijuana use. In the countries with high lifetime cocaine prevalence, such as Panama and Guatemala, the introduction to cocaine occurs at an earlier age than in countries with low prevalence (Haiti and the Dominican Republic). Further comparison to marijuana use in the previous section indicates that the introduction to cocaine occurs at a somewhat older age on average than to marijuana.

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In sum, men are far more likely than women to have used cocaine in their lifetime and in the past month in most of the Latin American and Caribbean countries studied. In some countries, metropolitan areas have higher lifetime cocaine prevalence than other smaller cities and rural areas. Persons ages 20-35 have higher lifetime prevalence than other age groups. As for age at first use, this study also coincides with the finding from the National Household Survey on Drug Abuse in the U.S. that the peak period of risk for cocaine initiation is in the early twenties, while marijuana users generally begin their first use in their early teens (Rouse, 1991). Likewise, a study on cocaine use in Canada identifies a high risk group for cocaine use as students, young males, and those in large cities, with an average age for starting of about 22 (Smart, 1991).

Cocaine is often used with alcohol and marijuana. According to a cocaine use study of American high school seniors, college students and young adults, twenty-eight percent of cocaine users said they used it with alcohol most or every time, and twenty percent reported using it with marijuana most or every time (O'Malley, 1991). Looking at the relationship between cocaine and alcohol use and cocaine and marijuana use for three countries, Guatemala, Panama and the Dominican Republic, we can see the strength of the connection between these pairs of substances. For Guatemala, 88% of the lifetime cocaine users have ever used alcohol, for Panama 97% and for the Dominican Republic 87%. With respect to lifetime use of cocaine as a proportion of lifetime use of marijuana, 62% of the lifetime users of cocaine in Guatemala have used marijuana, 68% of those in Panama and 74% of those in the Dominican Republic.[9]

E. Cocaine Paste

Unlike other illicit drugs, cocaine paste (bazuco) has not been widely used throughout Latin America and the Caribbean. Cocaine paste use has not been reported in the United States other than in a very few isolated cases[10]. Thus, the prevalence of cocaine paste is reported only in Bolivia, Colombia, Peru and Panama. Peru (1986) has the highest lifetime use of cocaine paste at 4.0%, and Colombia has the next highest lifetime prevalence at 3.7%. Panama, on the other hand, has the highest current prevalence at 0.9%. (See Figure 21).

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[9]. For Guatemala, the chi square for cocaine/alcohol is 9.1 with one degree of freedom and an N of 1807, for cocaine/marijuana it is 166.9 with one degree of freedom and an N of 1807. For Panama, the chi square for cocaine/alcohol is 8.9 with one degree of freedom and an N of 913, for cocaine/marijuana it is 272.7 with one degree of freedom and an N of 913. For the Dominican Republic, the chi square for cocaine/alcohol is 6.9 with one degree of freedom and an N of 913, for cocaine/marijuana it is 542.9 with one degree of freedom and an N of 913.

[10]. There were reports some years ago of cocaine paste use in several US metropolitan areas such as New York and Miami, but it would appear that increased crack use replaced any interest in the other form of smoking cocaine.

With regard to gender difference, men are more likely to have tried cocaine paste than women at sometime in their lives. The differences in lifetime use between men and women are striking in Colombia and Peru, while differences are small in Panama. With regard to current prevalence, there are contradicting patterns: in Colombia and Peru, men are more likely to have used cocaine paste in the last month, while in Panama, women are more likely to have used it in the same period, although the difference between men and women is not substantial. (See Figure 22).

Figure 23 presents a consistent pattern of cocaine paste use by geographic locality. Large cities have higher prevalence of cocaine paste use than smaller cities. Lima, Peru and Panama City, Panama, the biggest cities in the countries have the highest lifetime and current prevalence. Colon, the smallest city in the Panama survey has higher lifetime prevalence than San Miguelito[11], the second largest city.

As Figure 24 shows, persons in their late 20's and early 30's are more likely to have tried cocaine than other age groups. In Peru (1988) and Panama, persons ages 30-34 have the highest lifetime and current prevalence of cocaine paste use. Figure 25 also confirms that very few persons tried cocaine paste before they reached fifteen, and that most persons who have tried paste did so during their twenties.

In sum, the overall prevalence of cocaine paste is very low in the region. However, in Peru and Colombia the levels are higher than the use of crack in the U.S., the substance most like cocaine paste in form and consequences of use. Like other illicit drugs such as marijuana and cocaine, men and residents in large metropolitan areas are more likely than women and persons in smaller metropolitan areas to have used cocaine paste in their lifetime. Cocaine paste is more likely to have been used by an older cohort of persons compared to marijuana and cocaine. With regard to current prevalence, there are no consistent patterns by gender or localities due to the small number of cases of cocaine paste use observed in the region.

F. Crack

As a relatively new form of cocaine, which is often confused with cocaine hydrochloride in self-reports, the prevalence of crack has been reported only in Panama, Haiti and Dominican Republic. The level of lifetime prevalence of crack is very low, and that of current prevalence is negligible (see Figure 26). Therefore, further sub-group analysis may not be reliable due to the small number of cases of crack use recorded in each country.

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[11] Although San Miguelito is a separate entity from Panama City, it belongs to metropolitan Panama City.

G. Inhalants

Inhalants are the second most commonly used illicit substances in the set of Latin American and Caribbean countries in this study. Figure 27 shows that Bolivia has the highest lifetime inhalant prevalence in the region at 5.9%. Peru (1986(and Guatemala have the next highest at 3.6% and 3.4% respectively. Haiti and Panama have the next highest inhalant prevalence at 3.1% and 3.0%. Ecuador has the lowest lifetime prevalence at 1.3%, followed by Paraguay at 1.9%.

With respect to current prevalence, differences among the countries are also small, with levels ranging from 1.2% in Bolivia and Guatemala to 0.4% in Peru. A comparison of lifetime and current prevalence reveals that the proportion of current inhalant use among lifetime users is higher than for cocaine, except in Peru (1988), Bolivia and Panama, implying that inhalants are a more immediate problem than cocaine. In Guatemala, for example, 35% of persons who have tried inhalants are current users, whereas 21% of lifetime cocaine users are current users.

As Figure 28 presents, in all countries except Haiti, men are more likely than women to have tried inhalants in their lifetime. In Haiti, women have higher lifetime prevalence than men. The gender difference in lifetime inhalant use is the largest in Guatemala, at 6.1% of men and 1% of women. Nevertheless, the differences in inhalant use between men and women are smaller than with marijuana and cocaine. With respect to current prevalence, there are no clear differentials of inhalant use between men and women. In Guatemala, Peru and Panama, men are more likely to have used inhalants in the last month than women, while in the Dominican Republic and Bolivia, women are more likely than men to have used them in the same period. In Paraguay, there is no difference in current inhalant use between men and women.

Figure 29 shows inhalant use by geographic locality. In all countries except the Dominican Republic, the largest cities have the highest lifetime prevalence, although differences among localities are negligible in Guatemala and Peru (1988). In the Dominican Republic, mid-sized cities have the highest lifetime and current prevalence, and Santo Domingo, the largest city, has the lowest prevalence. Patterns of lifetime and current prevalence across localities are similar in most countries. In Peru, however, Lima, the largest metropolitan area, has lower current inhalant use than the provinces, but higher lifetime prevalence. This suggests that inhalant use has recently become more popular in the provinces than Lima.

Compared to other substance use, Figure 30 clearly shows that very young persons, ages 12-14, are far more likely to have used inhalants in their lifetime than older persons. In Guatemala, the Dominican Republic and Peru (1986), persons ages 12-14 have the highest lifetime prevalence, and the prevalence declines drastically in the older age groups. However, high current inhalant use among the oldest age group in Panama, Guatemala, the Dominican Republic and Peru (1988) suggests that although very young persons are more likely to have ever used inhalants, these substances are currently in vogue among certain groups of older persons.

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As Figure 31 presents, among lifetime inhalant users, the proportion of persons who first tried inhalants before age twelve is substantially higher than for alcohol, tobacco and other illicit drugs. In Peru, 18% of persons who have tried inhalants did so before their twelfth birthday, compared to 7% for alcohol, 6% for tobacco and 1% for marijuana. The proportion of persons who tried the substance before they reached age fifteen is also higher than for other substances. In the Dominican Republic, 60% of lifetime inhalant users tried the substance before age fifteen, compared to 39% for alcohol, 35% for tobacco and 15% for marijuana users. In every country, most lifetime inhalant users were introduced to the substance as teenagers, ranging from 82% in Panama to 88% in Guatemala.

Inhalants are far less likely to be used than cocaine in the United States (lifetime prevalence at 11.7% and 30 day prevalence at 5.6%) (NIDA, 1991b). In comparison, inhalants are the second most commonly used illicit drugs in the Latin American and Caribbean countries included in this study. Men are more likely than women to have tried inhalants in their lifetime. With regard to current inhalant use, there is no consistent pattern of gender difference. Children ages 12-14 and residents in large cities have higher lifetime and current prevalence than older persons and those in smaller cities. Age at first use for inhalants comes considerably earlier than alcohol, tobacco, marijuana and other illicit drugs.

H. Pharmaceuticals

Figure 32 presents the lifetime and current nonmedical use of pharmaceuticals (i.e., analgesics, stimulants, sedatives, hypnotics) in the region. Guatemala has by far the highest lifetime and current prevalence at 70% and 36%. Panama has the next highest lifetime prevalence at 45%. Haiti has the lowest lifetime prevalence at 3.3%, followed by the Dominican Republic at 15%. Peru has the second highest current prevalence level at 13%.

The differences in pharmaceutical use between men and women present a sharp contrast to those in other drug use. Whereas men are typically more likely to than women have used any illicit drugs, alcohol and tobacco, as Figure 33 shows, women are more likely than men to have tried a pharmaceutical in their lifetime in countries such as Panama and the Dominican Republic. In Guatemala and Haiti, men are more likely to have tried pharmaceuticals than women, although the differences are small. With respect to current prevalence, in all countries except Haiti, women are more likely than men to have used a pharmaceutical in the past month.

In general, pharmaceutical use does not differ by locality. In Guatemala, Guatemala City, the largest city, has the highest lifetime and current prevalence, while in Panama, Colon, the smallest city in the survey, has the highest lifetime prevalence and Panama City, the largest city, has the highest current prevalence (see Figure 34).

Figure 35 indicates that older persons are more likely than younger persons to have used a pharmaceutical in their lifetime. For current prevalence, this pattern is clearer in Guatemala

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and the Dominican Republic than in Panama and Haiti. As with alcohol, however, the differences across age groups are not as large as with marijuana, cocaine and inhalant use.

Figure 36 presents the percentages of lifetime pharmaceutical users by age at first use. In Guatemala, where the prevalence is high, 82% who have tried pharmaceuticals did so before they reached age twelve and the most commonly used substance among pharmaceuticals was analgesics(i.e. opiates). In other countries, less than 13% of lifetime pharmaceutical users first tried before age twelve, ranging from 8% in the Dominican Republic to 12% in Panama. In Guatemala, 91% of lifetime users were introduced to pharmaceuticals as teenagers, compared to 53% in the Dominican Republic, 62% in Panama and 70% in Haiti. Except in Guatemala, the proportion of lifetime pharmaceutical users who initiated use during their teens is lower than for alcohol and tobacco users.

In the Latin American countries where data are available (Guatemala, Panama, Peru, the Dominican Republic and Haiti), women and older persons are more likely than men and younger persons to have used pharmaceuticals in their lifetime and in the past month. There is no consistent pattern across geographic localities in pharmaceutical use. Lifetime prevalence levels are higher in Guatemala, Panama and Peru than they are in the United States although that may in part reflect differences in the way that those data are generated.

3. Discussion

The data sets for the Latin American and Caribbean countries studied show alcohol as the most commonly used substance, followed by tobacco. Marijuana is the most commonly used illicit substance, followed by cocaine, cocaine paste, and inhalants. The prevalence of crack in these countries is very low. In most countries, pharmaceuticals are more likely to be used than marijuana, cocaine, and other illicit drugs.

Peru has the highest prevalence levels of alcohol, tobacco and cocaine paste, Bolivia, the highest prevalence levels of inhalant use. Jamaica has the highest prevalence of marijuana use. Panama has the highest prevalence of cocaine, and Guatemala has the highest prevalence of pharmaceutical use. Jamaica has, by far, the highest prevalence for marijuana use. Marijuana use in Jamaica is clearly a cultural phenomenon that has already been explored in great detail.[12]

Men are more likely than women to have used alcohol, tobacco, and illicit drugs, whereas women are more likely than men to have used pharmaceuticals in their lifetime and in the past month. Except for alcohol and pharmaceuticals, residents of larger cities are more

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[12]cf. Vera Rubin and Lambros Comitas, **Ganja in Jamaica**, (Mouton, the Hauge, 1975), Melanie Dreher, **Working Men and Ganja**, (ISHI, Philadelphia, 1982).

likely than persons in smaller urban areas and rural areas to have used tobacco and illicit drugs.

Older persons are more likely than younger persons to have used alcohol, tobacco, and pharmaceuticals. Persons ages 20-39 are more likely to have used marijuana than older and younger persons, and persons ages 20-29 are more likely than others to have used it in the past month. Cocaine paste users are somewhat older than marijuana and cocaine users. The prevalence of inhalant use is highest among very young persons, ages 12-14. Age at first use is lowest among inhalant lifetime users and increases for lifetime users of alcohol, tobacco, marijuana, cocaine, and cocaine paste. The pattern that is suggested by this data is that the drug of initiation to the use of these substances is more likely to be inhalants than any other.

It is worth noting as well that with respect to marijuana and cocaine, there is an important difference between high prevalence and low prevalence countries. In high prevalence countries, the age of initiation of use is earlier on average than in low prevalence countries. Stated in other terms, higher levels of cocaine and marijuana prevalence are associated with early initiation to use. Whether this is cause or effect cannot be determined from this study, but warrants further investigation.

Where it was possible to analyze the data in greater detail, i.e., where we had direct access to the data sets (Guatemala, Panama, and the Dominican Republic), it is clear that there are close links between alcohol and tobacco use; alcohol, tobacco, and marijuana use; alcohol, tobacco, and cocaine use; and marijuana and cocaine use. Further studies need to be directed at a more detailed examination of the links between these substances.

Certain similarities in use patterns can be noted between the United States and the Latin American and Caribbean countries. For example, for both the Latin American and Caribbean countries and the United States, alcohol and tobacco have the highest prevalence levels among licit substances. Marijuana is the most common illicit substance. Men are more likely than women to use most drugs. Young adults are more likely than other age groups to be users of drugs such as cocaine, crack or cocaine paste.

These universal patterns suggest that there are certain common elements in the nature of drug use in the Americas. There are also important differences that need to be considered. Absolute levels of prevalence vary both within the set of Latin American and Caribbean countries and between those countries and the United States. The United States does have a higher overall level of prevalence for substances such as marijuana and cocaine, but those levels have been declining in recent years. The Latin American and Caribbean countries have lower levels of prevalence, but show indication that these prevalence levels are on the rise. For example, Guatemala has a much higher ratio of current(last 30 days) to lifetime users of

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marijuana and cocaine than is the case in the United States.[13]This suggests that use is a far newer and more active phenomenon in Guatemala than it is in the United States. In the case of Peru, use of cocaine, cocaine paste and marijuana grew dramatically in Lima from 1979 to 1986, even though that growth appears to be slowing down in recent years.(Jutkowitz, 1987 p.109). The question arises, are the differences in prevalence levels between the United States and the group of Latin American and Caribbean countries indicative of differences in the historical trajectory of the drug problem. Will the much more recent phenomenon of drug use in many of these Latin American and Caribbean countries such as Guatemala, Panama and Bolivia continue to rise to levels closer to the patterns of the far more mature drug situation in the United States? More exploration is needed of this and other issues that come to mind as a result of an examination of the data.

4. Conclusions: The Need for Further Research

As we just noted, the comparison of Latin American and Caribbean prevalence rates with those of the United States suggests the value of a comparative perspective on the problems and the importance of looking at the historical trajectory of drug use patterns. The data suggest additional questions that need to be explored.

There are common patterns of drug use that transcend countries (higher use by men, higher use by young adults, high levels of correlation between users of tobacco, marijuana and cocaine). This suggests that there are certain universals in drug use patterns, at least within the Americas. But there are also important differences that appear. Bolivia, for example has a far higher use level of inhalants than any other country reporting. Guatemala has high current use levels for several illicit drugs as does Panama. Marijuana use in Jamaica far outstretches that of other countries in the region. A very few of these differences can easily be explained. Ganja (as marijuana is referred to in Jamaica) is very much a part of Jamaican culture and it is reasonable to expect high marijuana prevalence levels. But, what other factors can explain differences on a country by country basis?

The literature suggests a variety of explanations, but even a brief examination of our data suggest the weaknesses in the arguments that are often made. One argument often heard is that availability results in higher use. Therefore, producer/trafficker countries are more likely to be user countries than non-producer/non-trafficker countries. Our data suggest that this is only, at best, a partial explanation. The countries with the highest levels of cocaine use qualify as either producer or trafficker countries (Panama, Colombia, Peru), but other trafficker countries such as the Dominican Republic and Bolivia show lower levels of cocaine use. Availability is not sufficient to assure higher levels of use. There are other variables that need to be taken into account, for example, the whole set of attitudinal variables that define perception

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[13]. The ratio of lifetime to current(30 day) prevalence for marijuana is 41% for Guatemala and 14% for the United States. For cocaine, the respective ratios are 21% for Guatemala and 8% for the United States.

of risk and risk taking behavior with respect to specific substances.

Another set of explanations for drug use center around the degree to which poverty promotes drug use. Higher degrees of poverty are presumed to be associated with higher levels of drug use. If we look at the question in global fashion, the poorest countries in the region[14] such as Haiti and Paraguay have far lower levels of drug use than all other countries studied. Again, there is a suggestion that further research is needed into the relationship between poverty and drug use. Countries such as Peru and Guatemala are not well off when compared to for example Colombia and Mexico, and do have greater drug problems than Haiti and Paraguay. The question to be researched might be restated to "what factors in addition to poverty levels contribute to drug use".

Clearly, the data presented in this study suggest the importance of addressing the causes of drug use as multivariant and not univariant. The data also suggest, as we have noted above, that we need to recognize both the universal elements, gender differences, age differences, linkages between use of one substance and another, and the cultural specific or nation specific factors that define drug use in the Americas. Finally, the data point to the importance of the need to view drug use as a changing phenomenon, changing in terms of the prevalence patterns within a country, and changing as countries go through what may be termed historical cycles of drug use.

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[14]. For a discussion of relative levels of poverty in Latin America see "Basic Human Needs and the Democratic Process in Latin America", **North-South Issues**, Vol. II, no.2, 1993, p.2.

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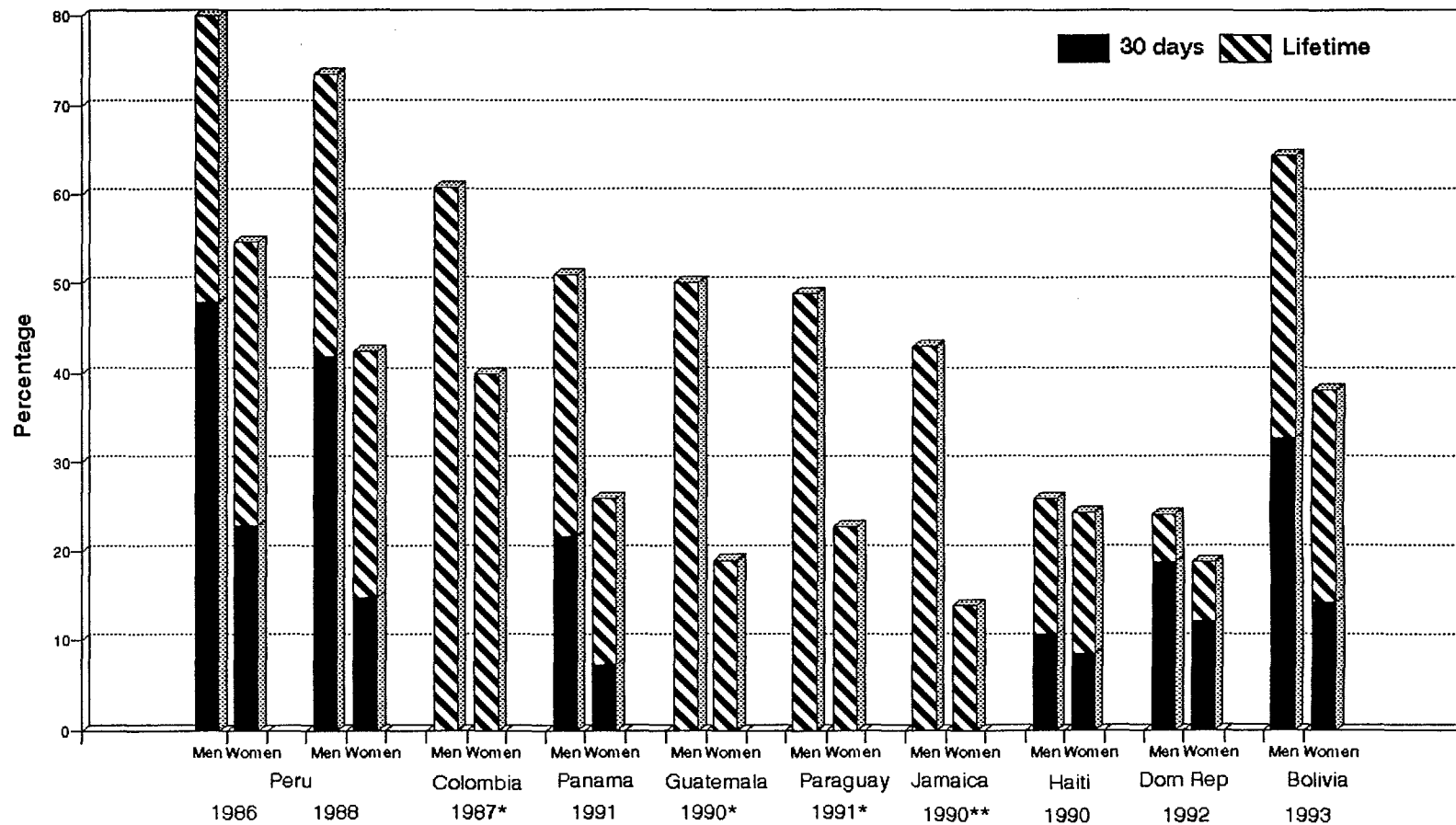
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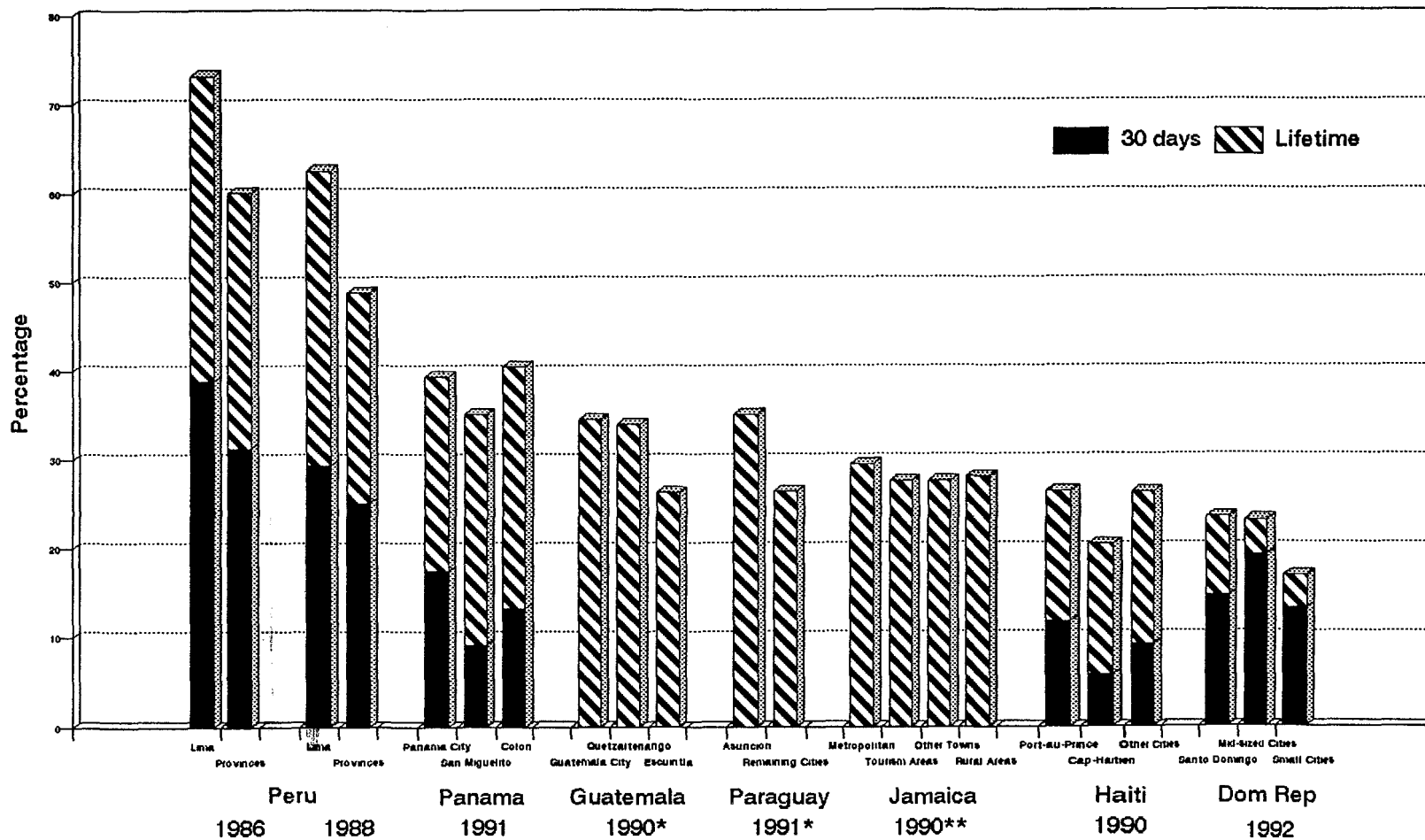# Figure 1
Prevalence of Alcohol Use in Latin American and Caribbean Countries
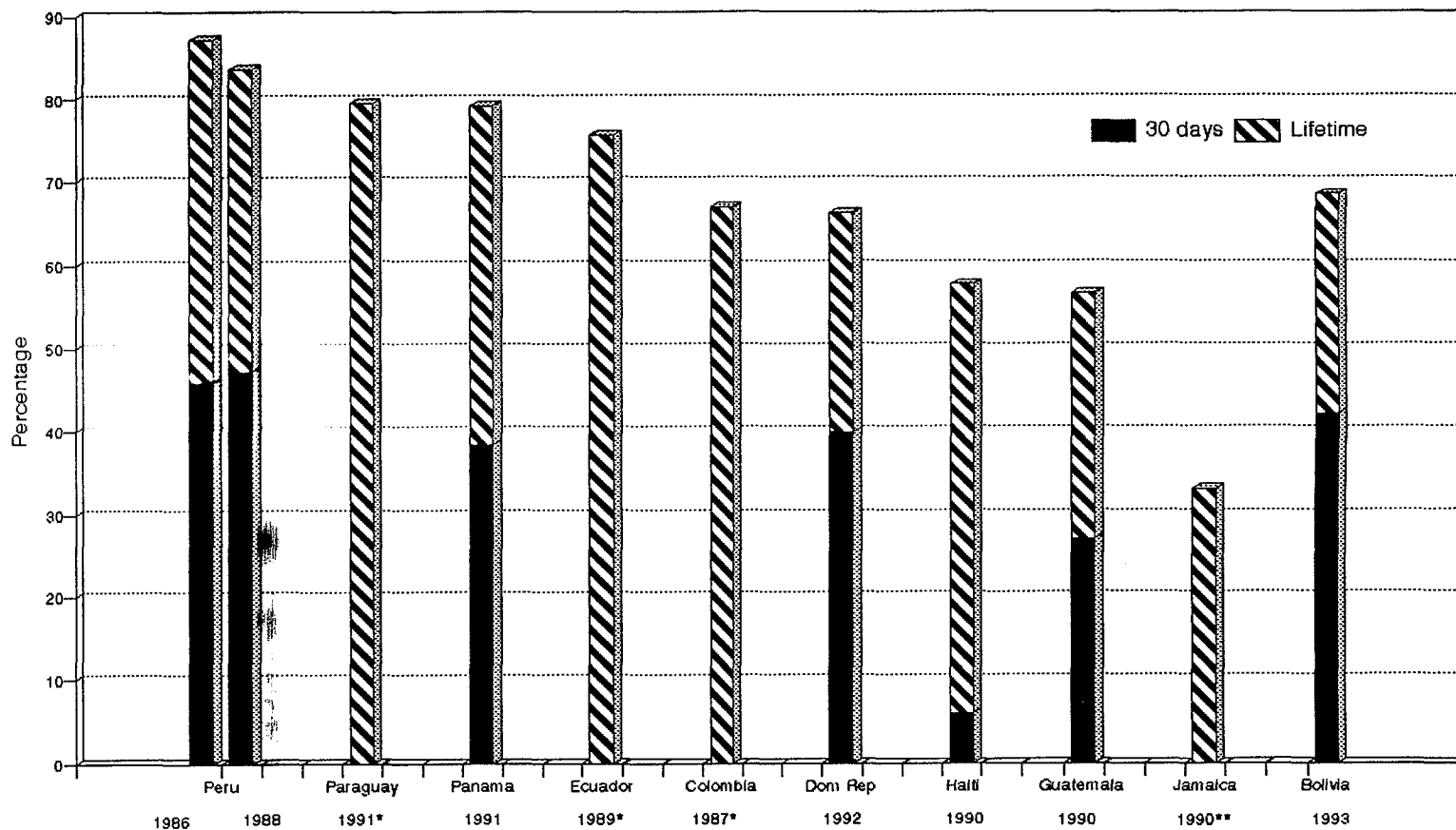
* Data on 30-day prevalence not available
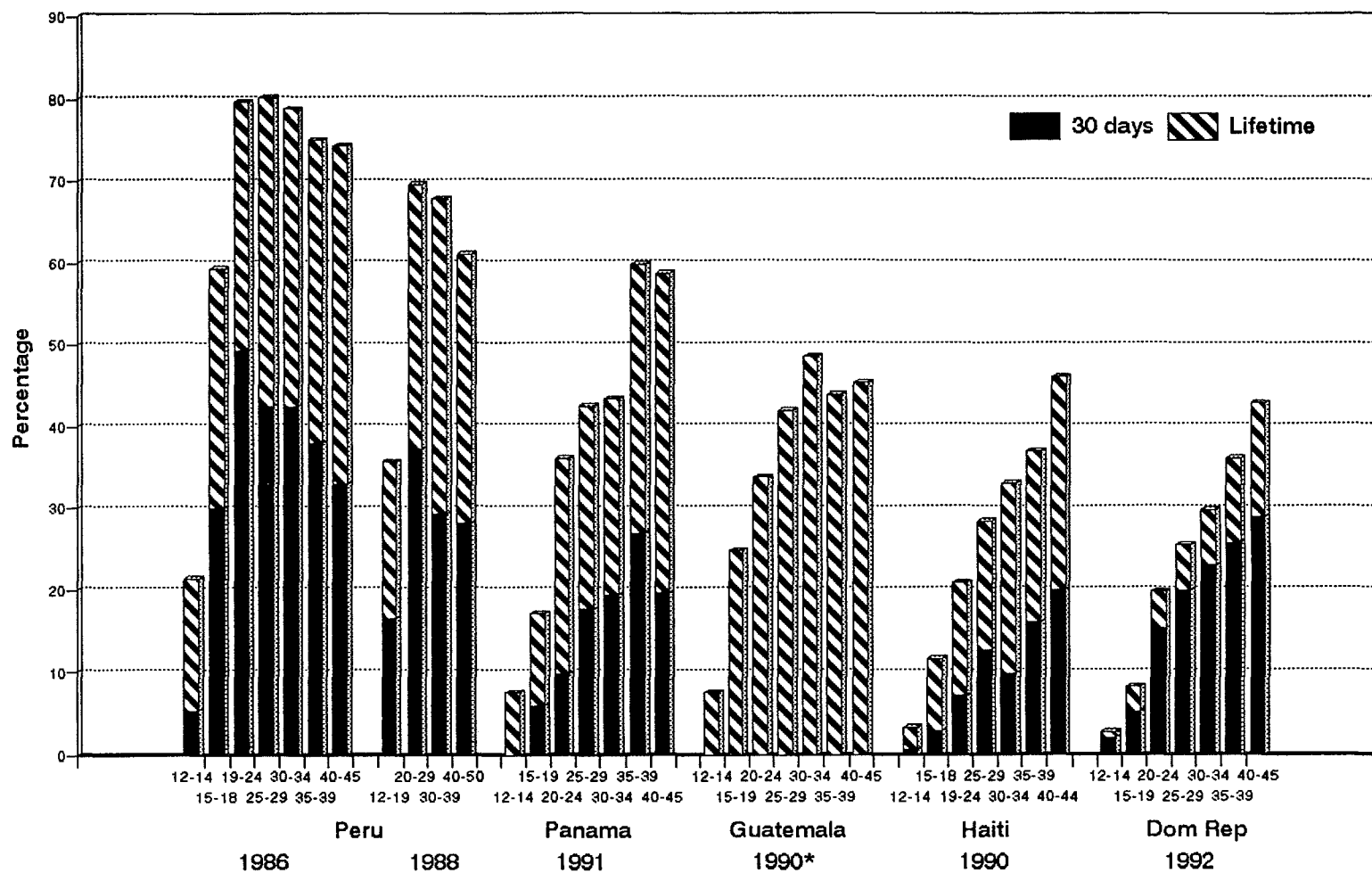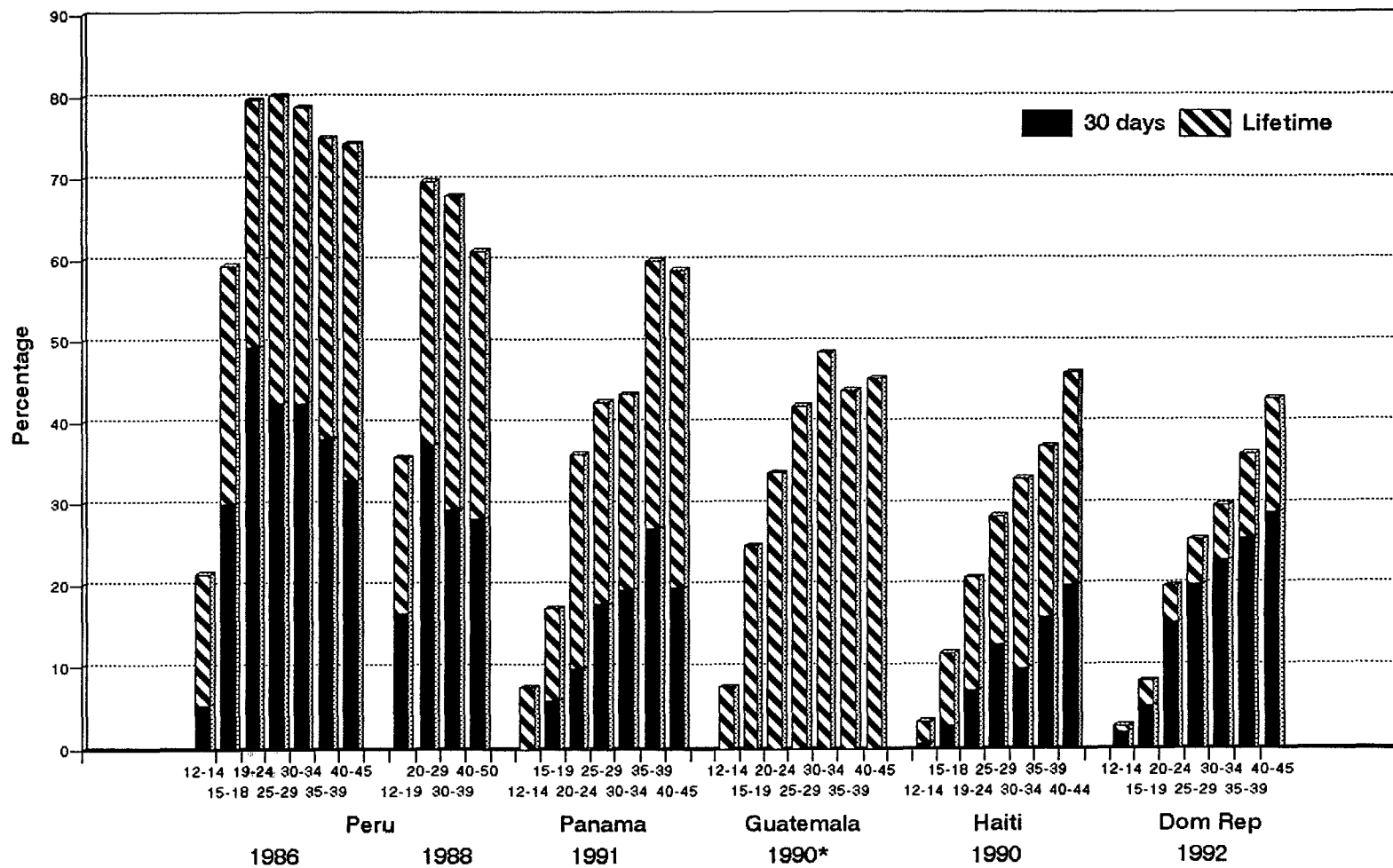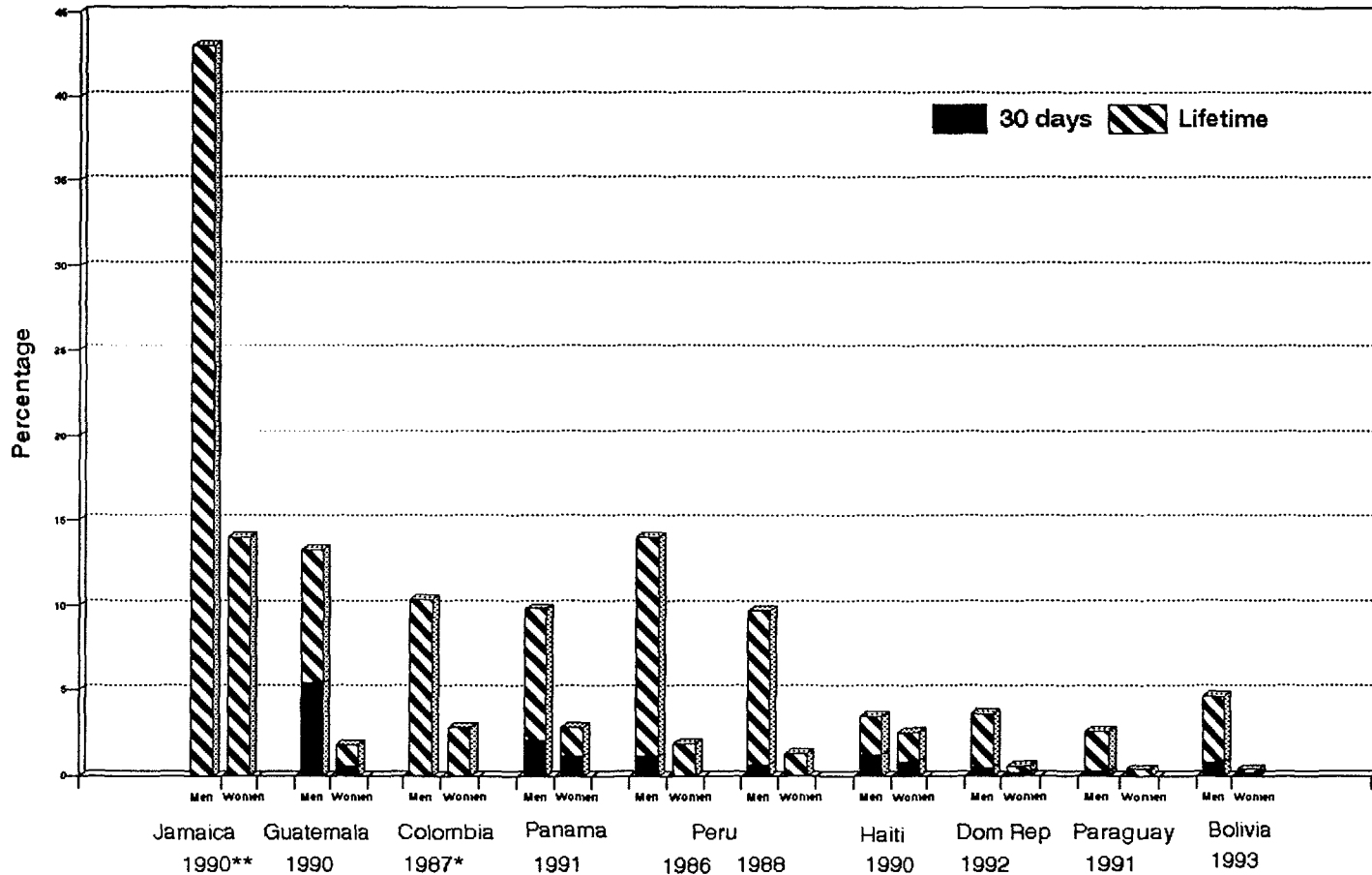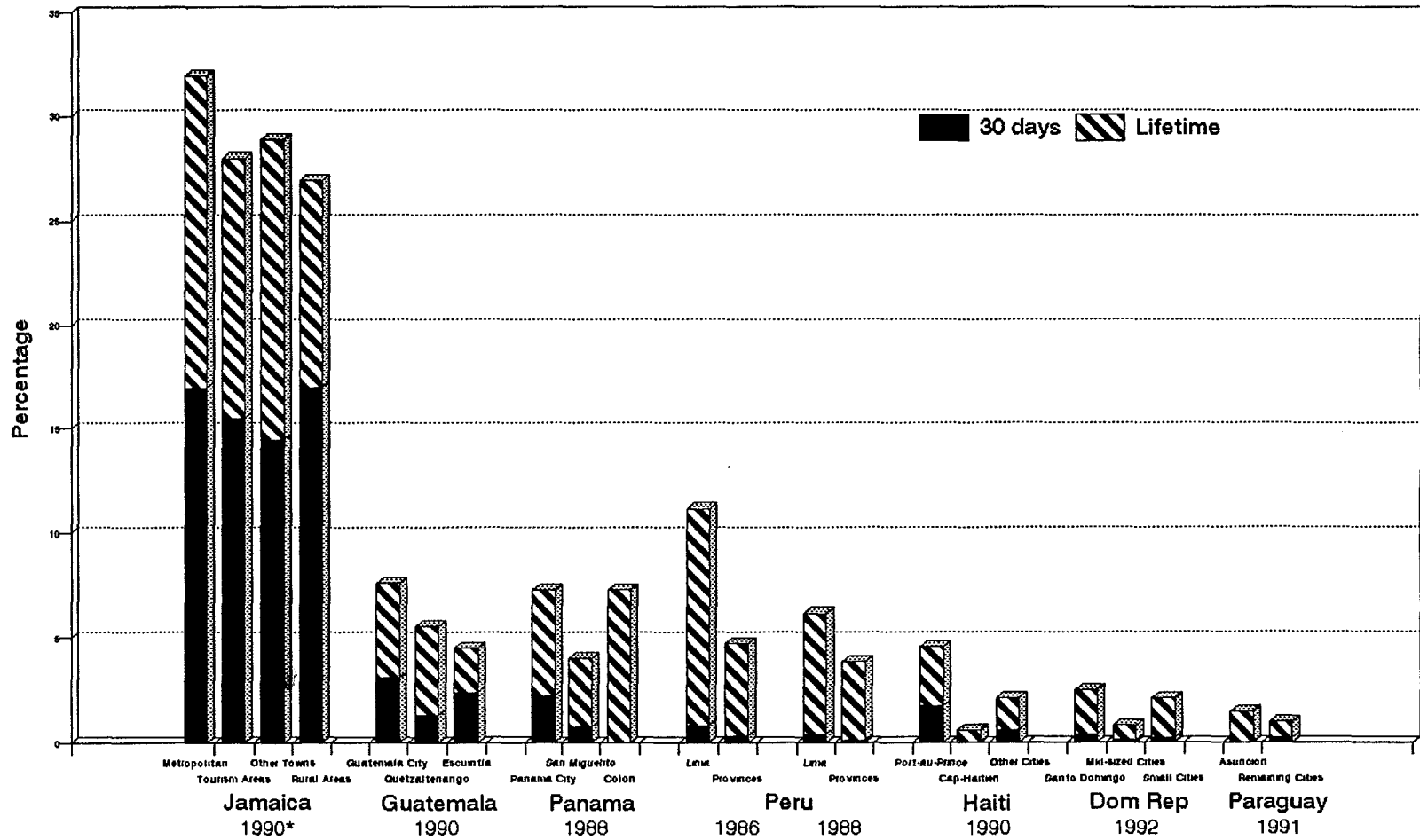** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 2
Prevalence of Alcohol Use by Gender in Latin American and Caribbean Countries
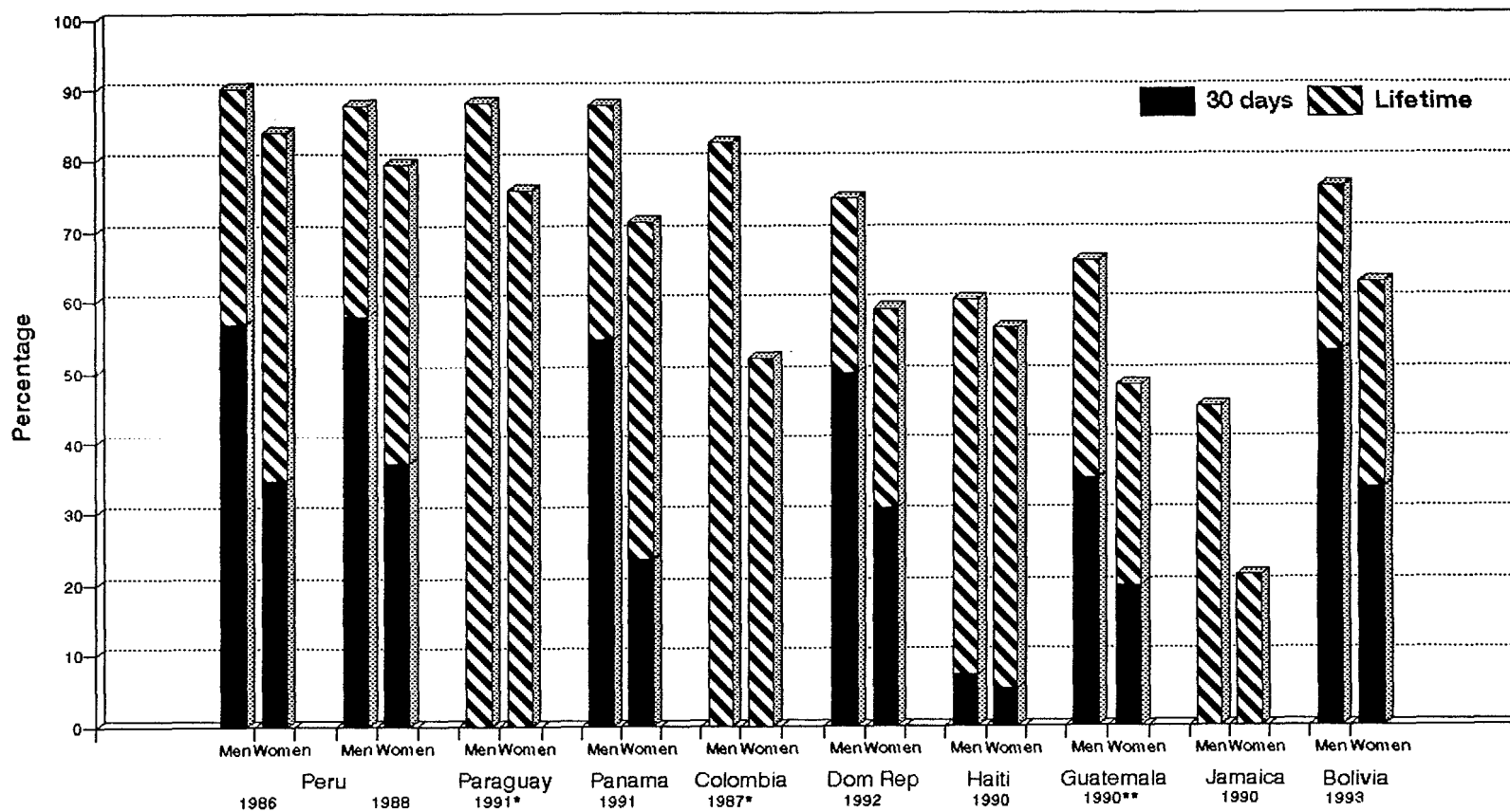
* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 3
Prevalence of Alcohol Use by Locality in Latin American and Caribbean Countries
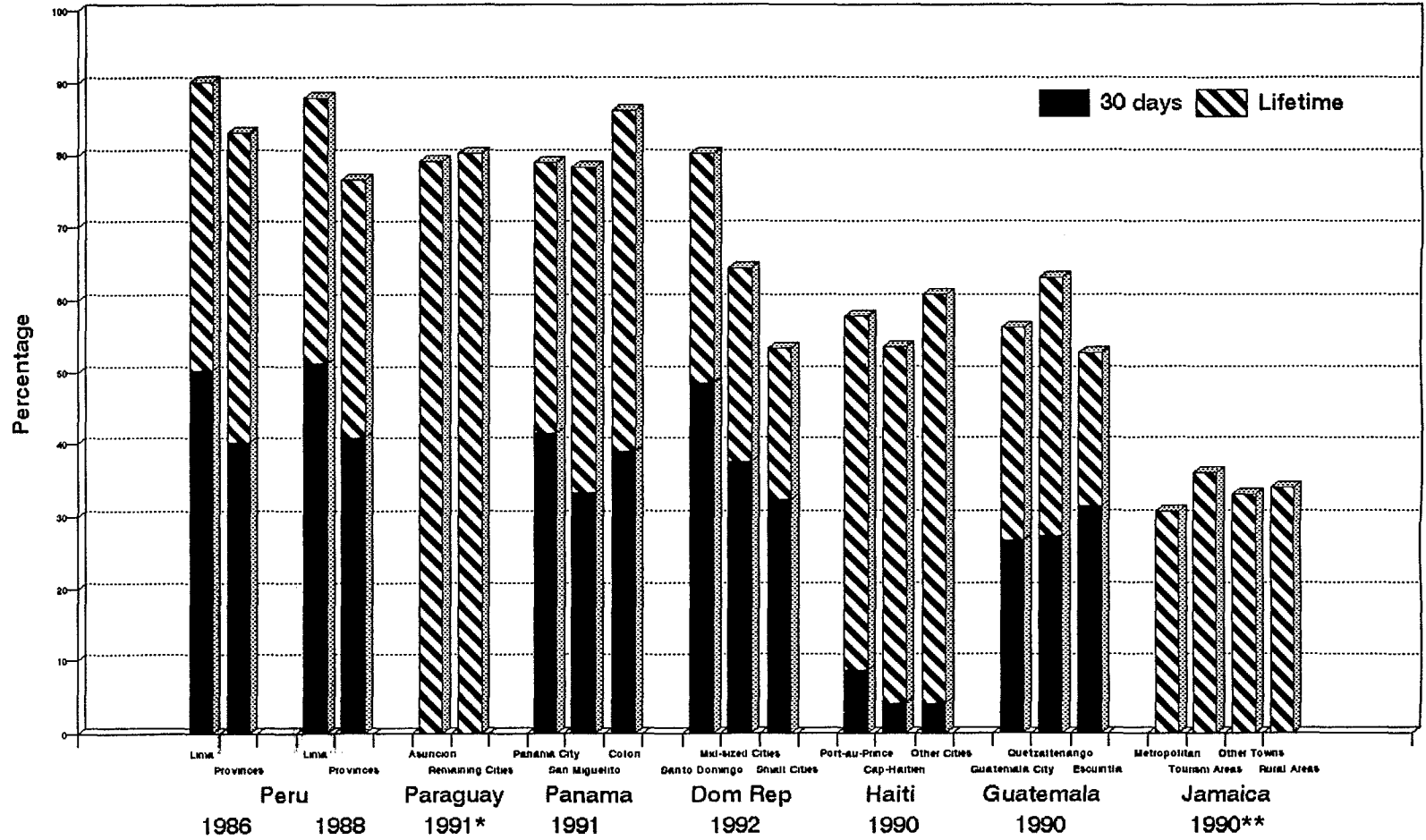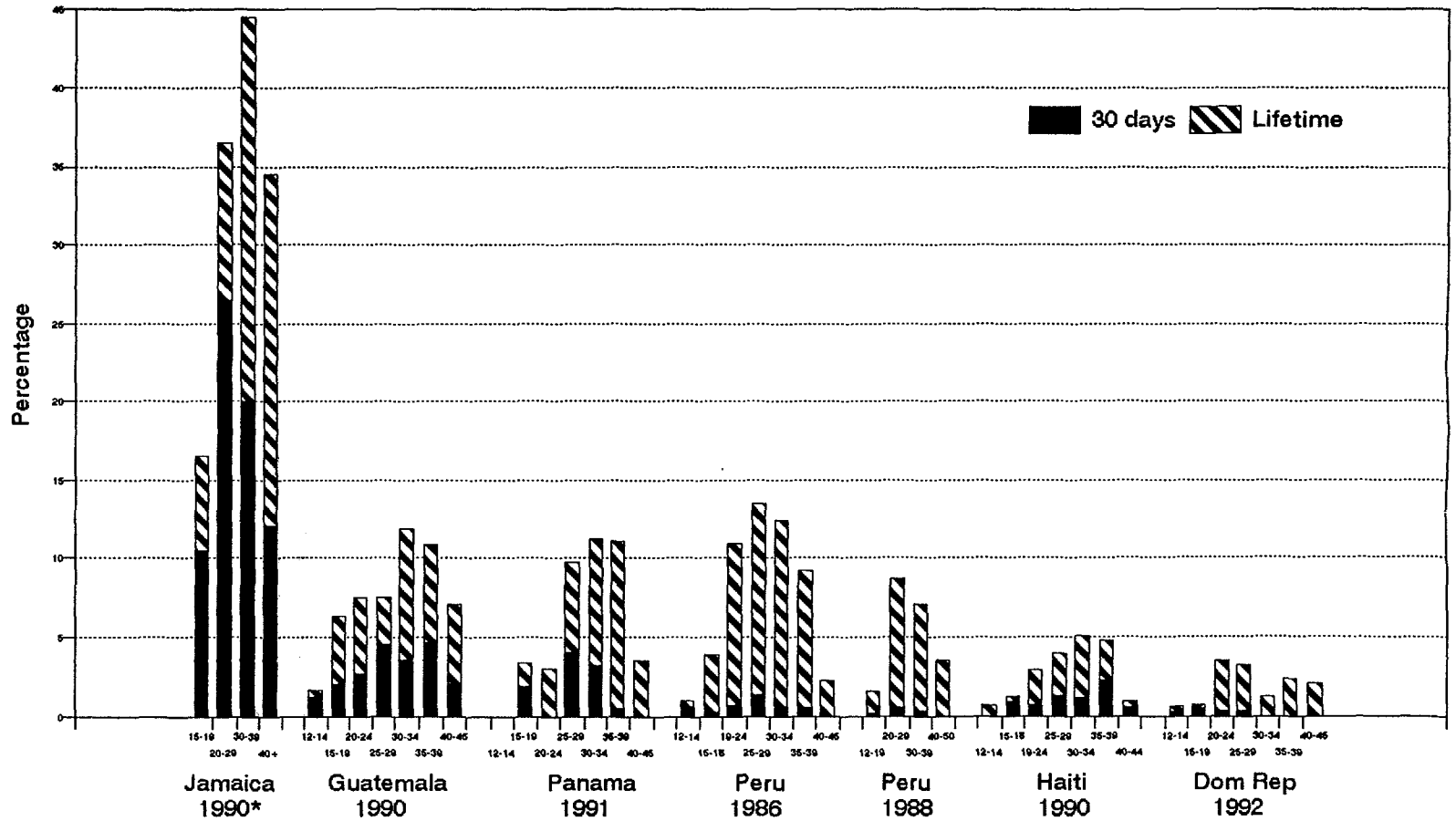

* Data on 30-day prevalence not available

** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 4
Prevalence of Alcohol Use by Age Groups in Latin American and Caribbean Countries
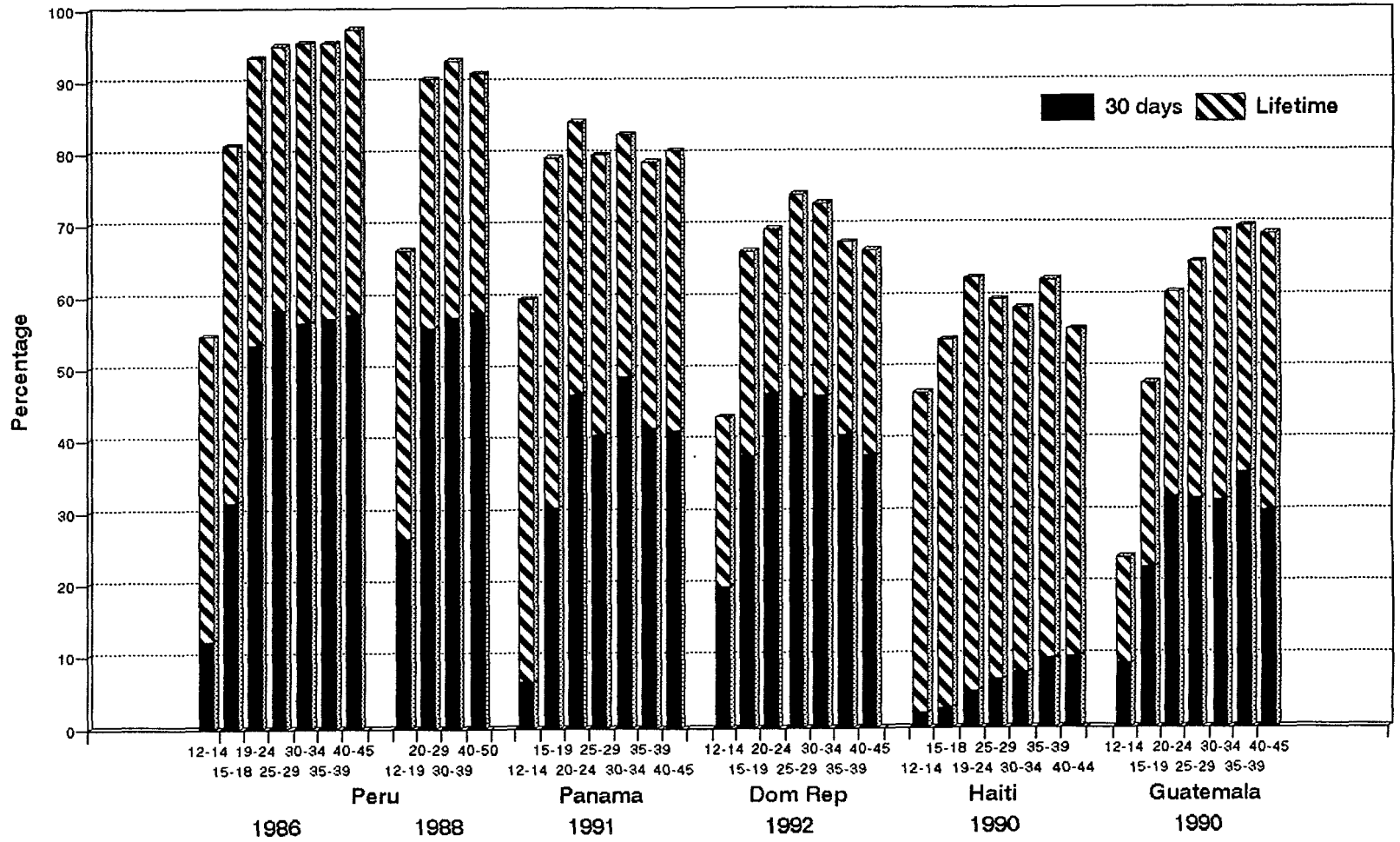
Figure 5

Percentage of Lifetime Users of Alcohol by Age at First Use
in Latin American and Caribbean Countries

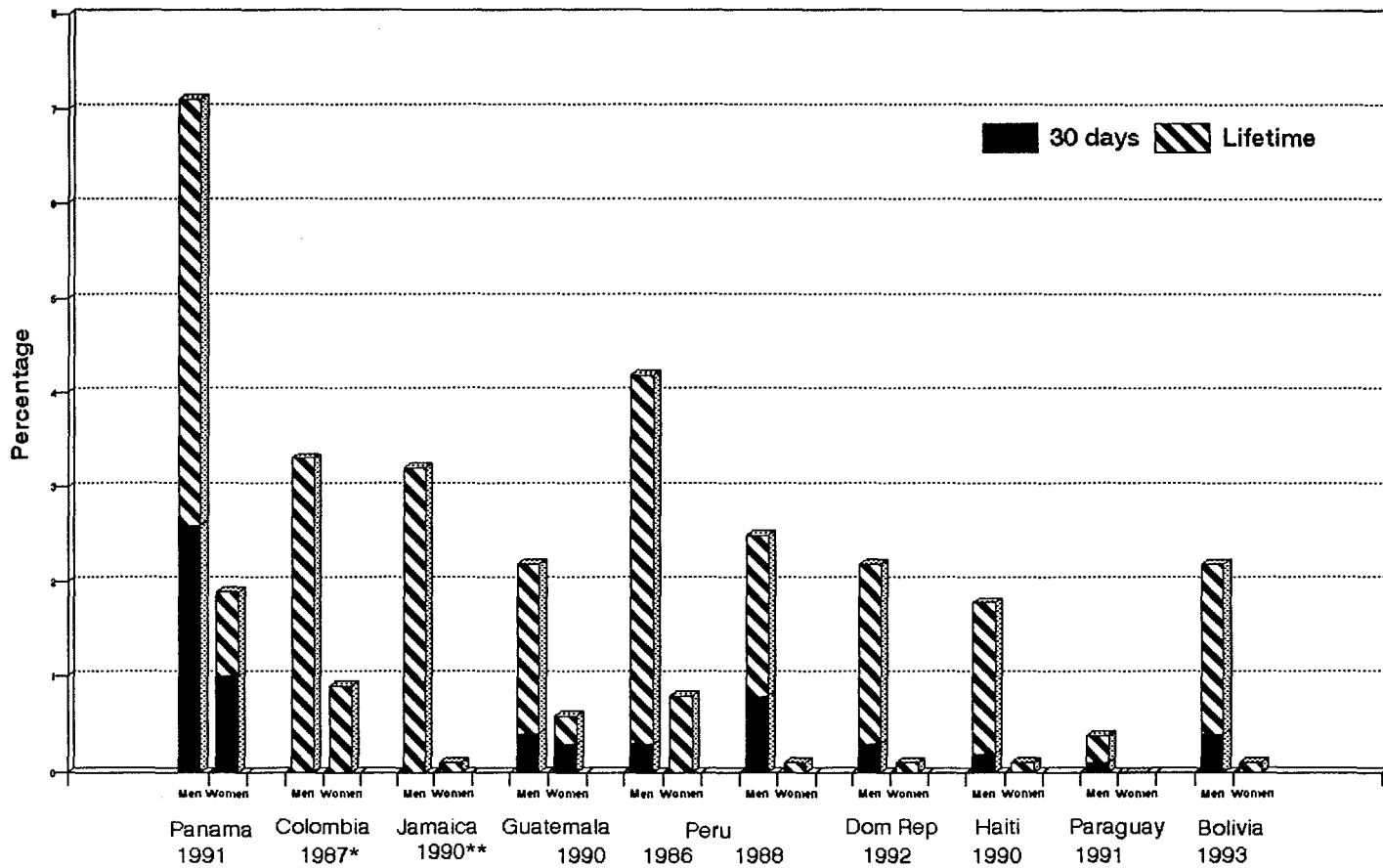Peru 1986   Panama 1991   Dom Rep 1992   Haiti 1990   Guatemala 1990
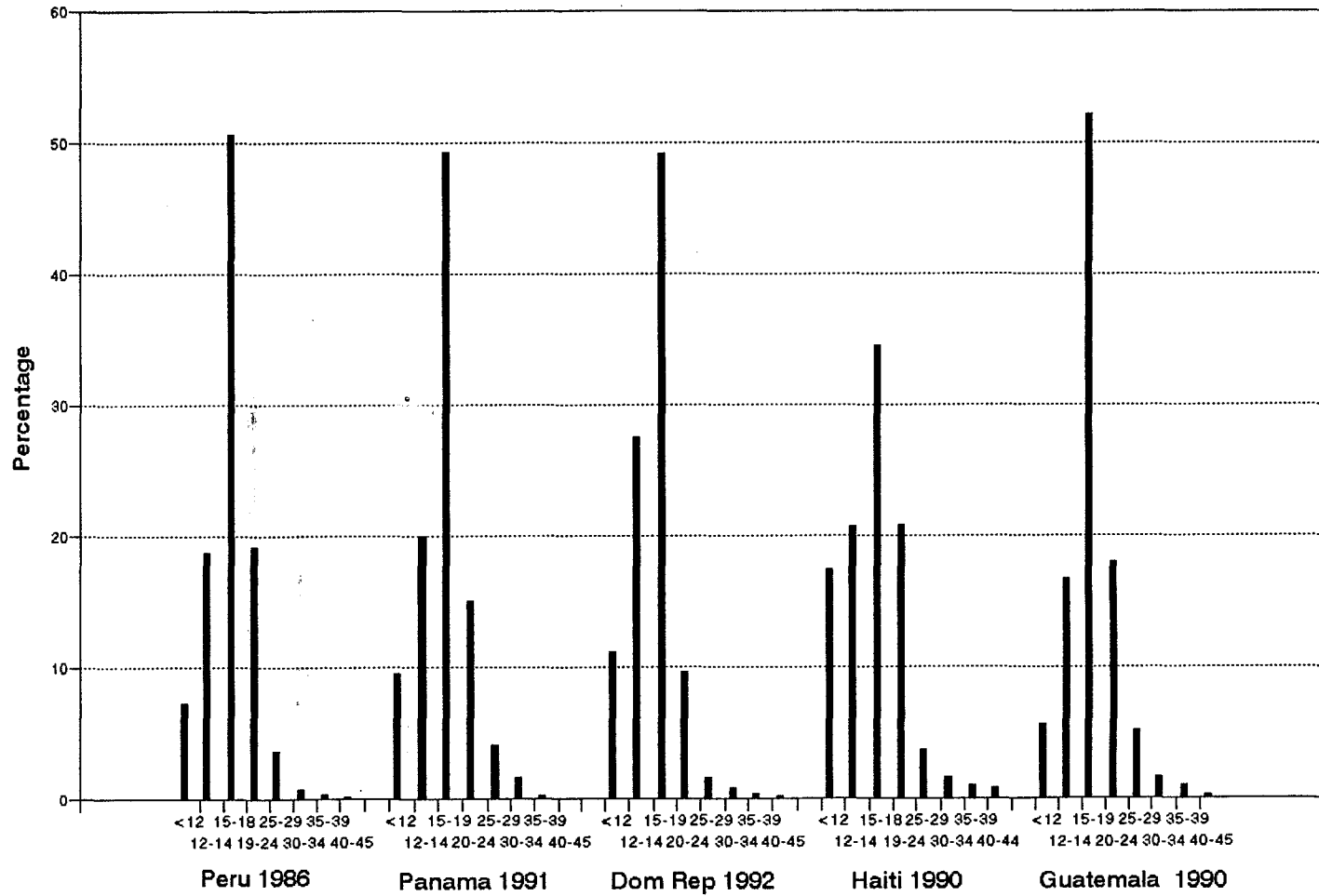
Figure 6
Prevalence of Tobacco Use in Latin American and Caribbean Countries
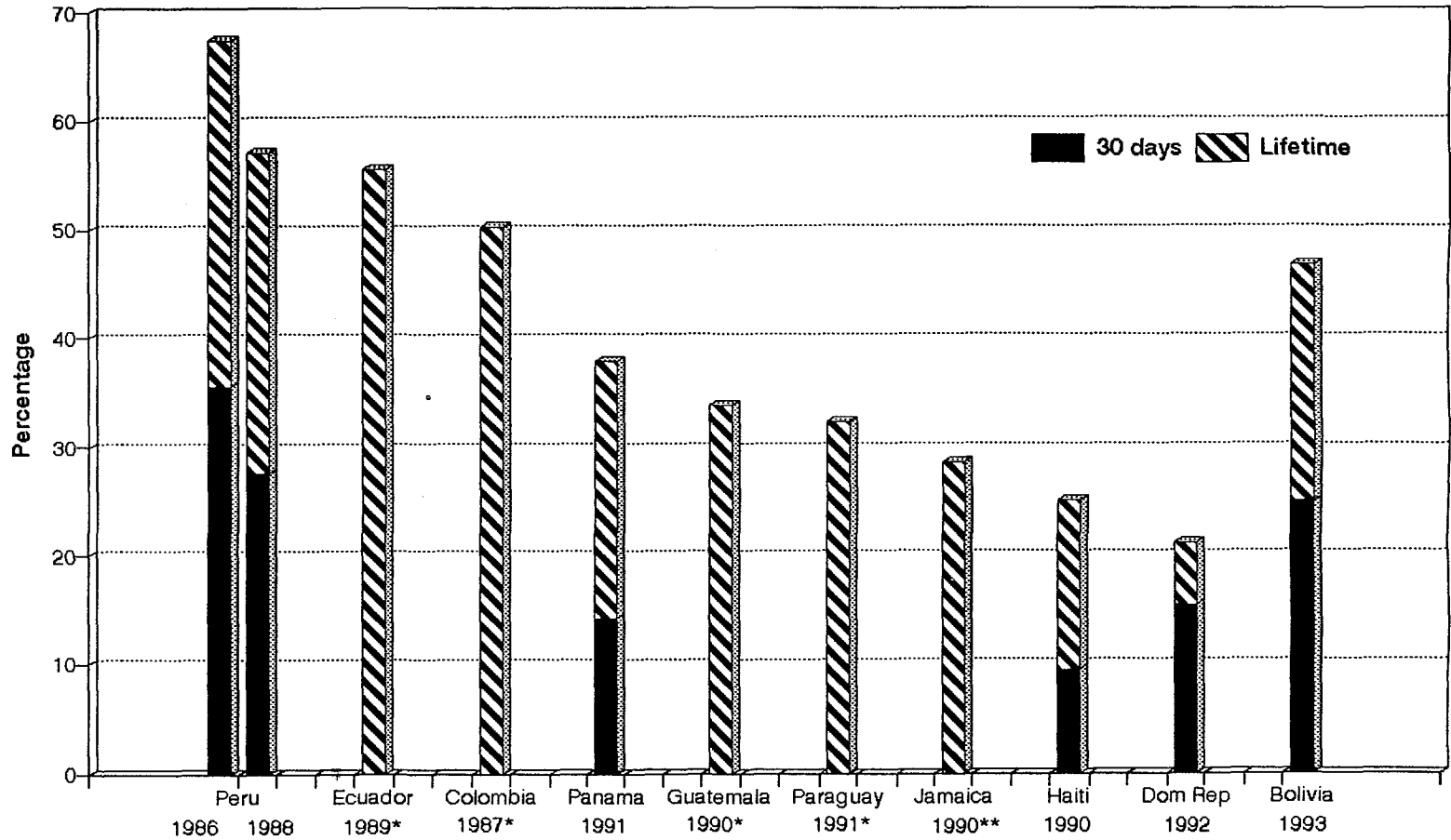
* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, National sample of 15 years and over, rural areas included

Figure 7
Prevalence of Tobacco Use by Gender in Latin American and Caribbean Countries

* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 8
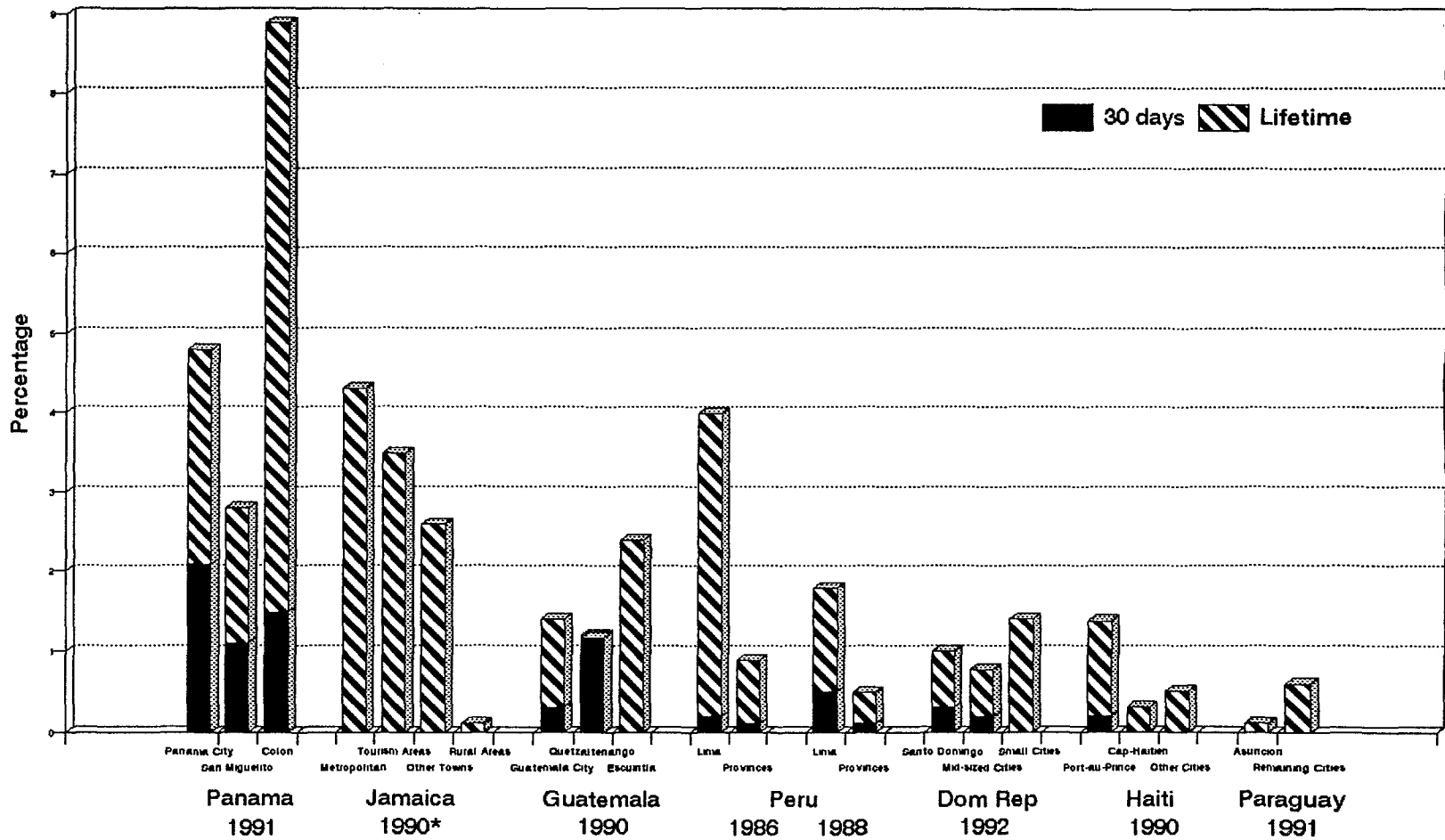## Prevalence of Tobacco Use by Locality in Latin American and Caribbean Countries

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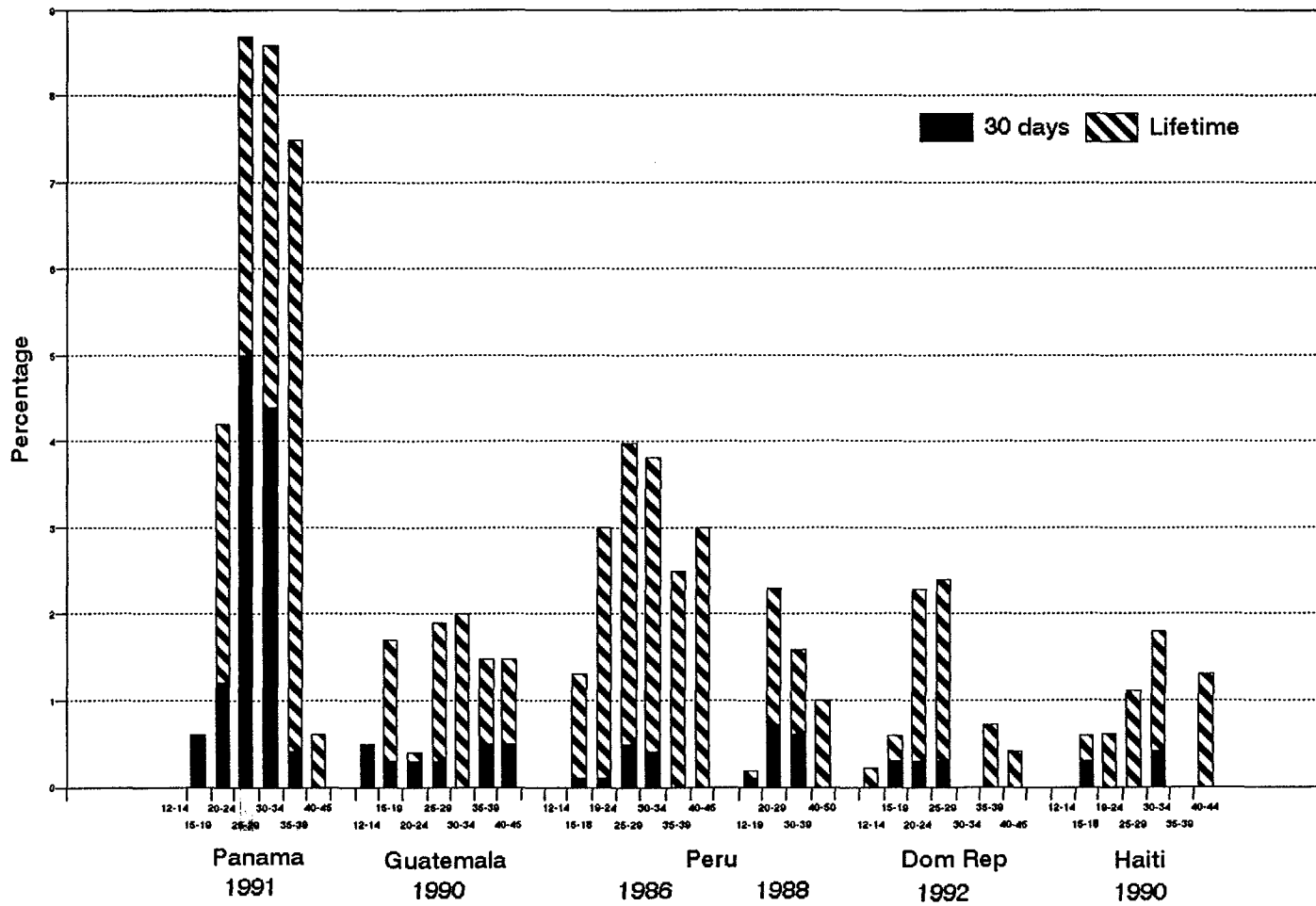** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 9
Prevalence of Tobacco Use by Age Groups in Latin American and Caribbean Countries

* Data on 30-day prevalence not available

Figure 10

Percentage of Lifetime Users of Tobacco by Age at First Use
in Latin American and Caribbean Countries

Percentage

■ 30 days ▨ Lifetime

90
80
70
60
50
40
30
20
10
0

12-14 19-24 30-34 40-45   20-29 40-50   15-19 25-29 35-39   12-14 20-24 30-34 40-45   15-18 25-29 35-39   12-14 20-24 30-34 40-45
  15-18 25-29 35-39   12-19 30-39   12-14 20-24 30-34 40-45   15-19 25-29 35-39   12-14 19-24 30-34 40-44   15-19 25-29 35-39

Peru   Panama   Guatemala   Haiti   Dom Rep
1986   1988   1991   1990*   1990   1992

* Data on 30-day prevalence not available

Figure 11
Prevalence of Marijuana Use in Latin American and Caribbean Countries
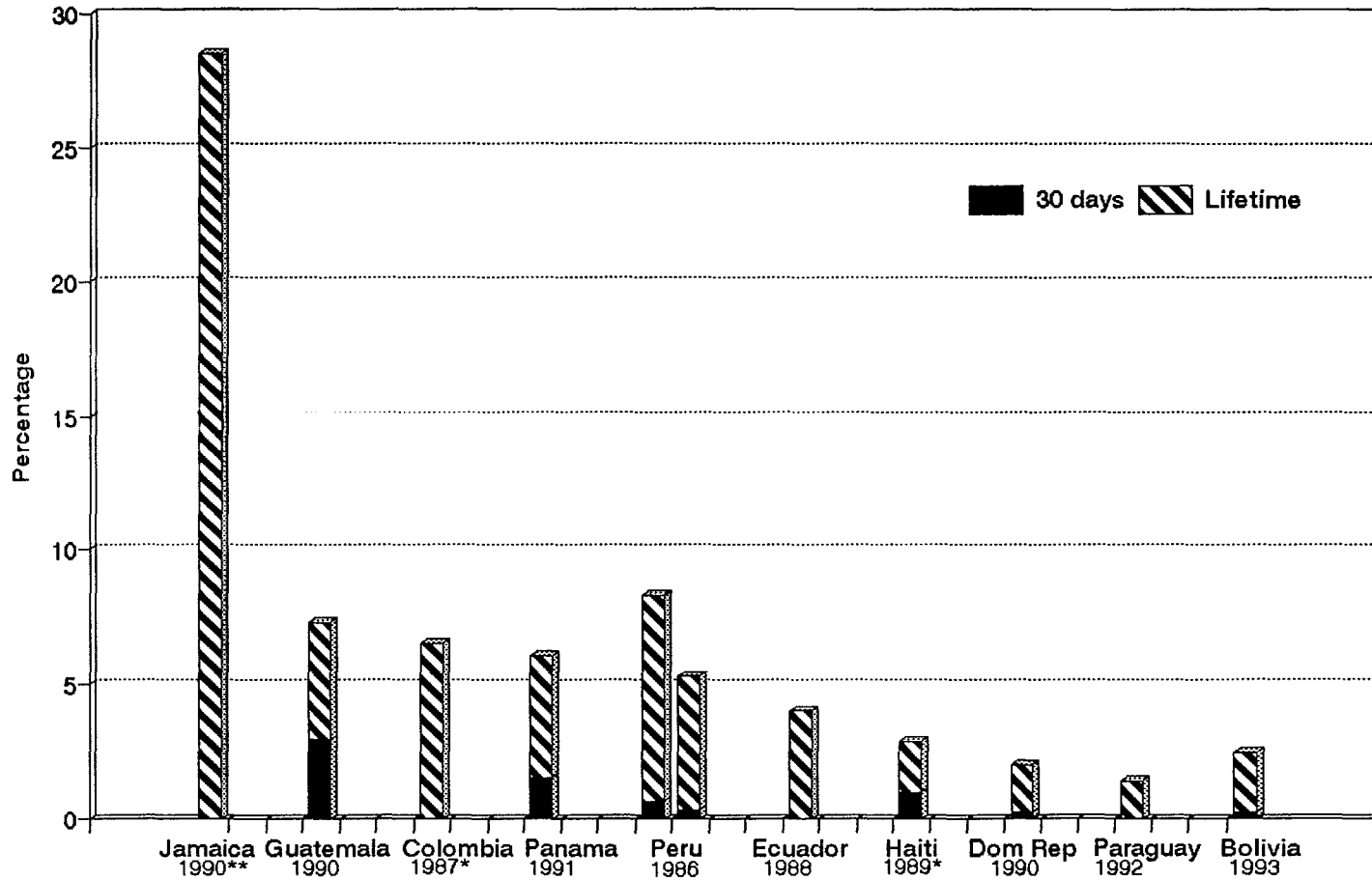
* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 12
Prevalence of Marijuana Use by Gender in Latin American and Caribbean Countries

* Data on 30-day prevalence not available

** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 13
Prevalence of Marijuana Use by Locality in Latin American and Caribbean Countries

* National sample of 15 years and over, rural areas included

Figure 14
Prevalence of Marijuana Use by Age Groups in Latin American and Caribbean Countries

* National sample of 15 years and over, rural areas included

Figure 15
Percentage of LIfetime Users of Marijuana by Age at First Use
in Latin American and Caribbean Countries
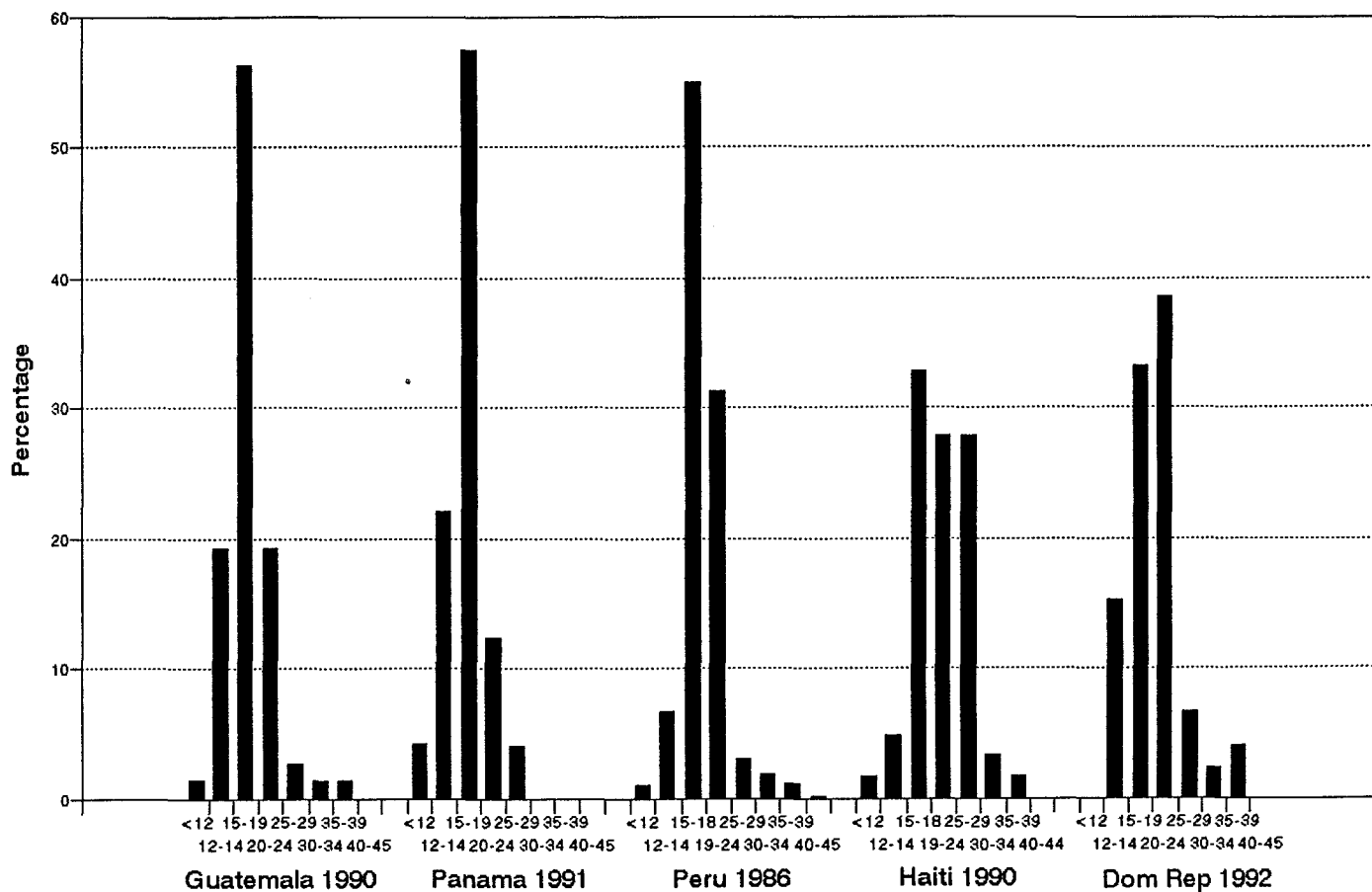
Figure 16
Prevalence of Cocaine Use in Latin American and Caribbean Countries
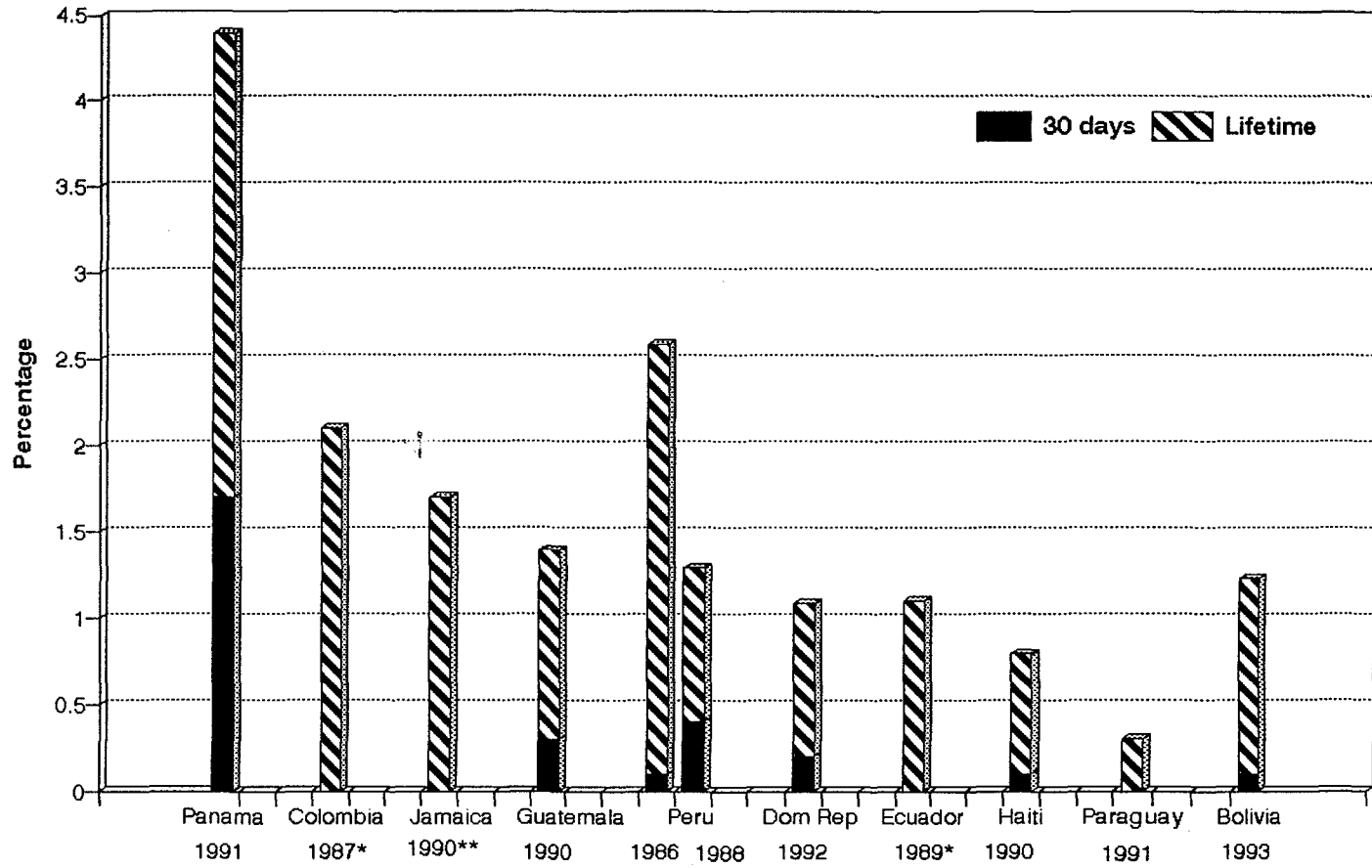
* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 17
Prevalence of Cocaine Use by Gender in Latin American and Caribbean Countries

* Data on 30-day prevalence not available
** Data on 30-day prevalence not available, national sample of 15 years and older, rural areas included
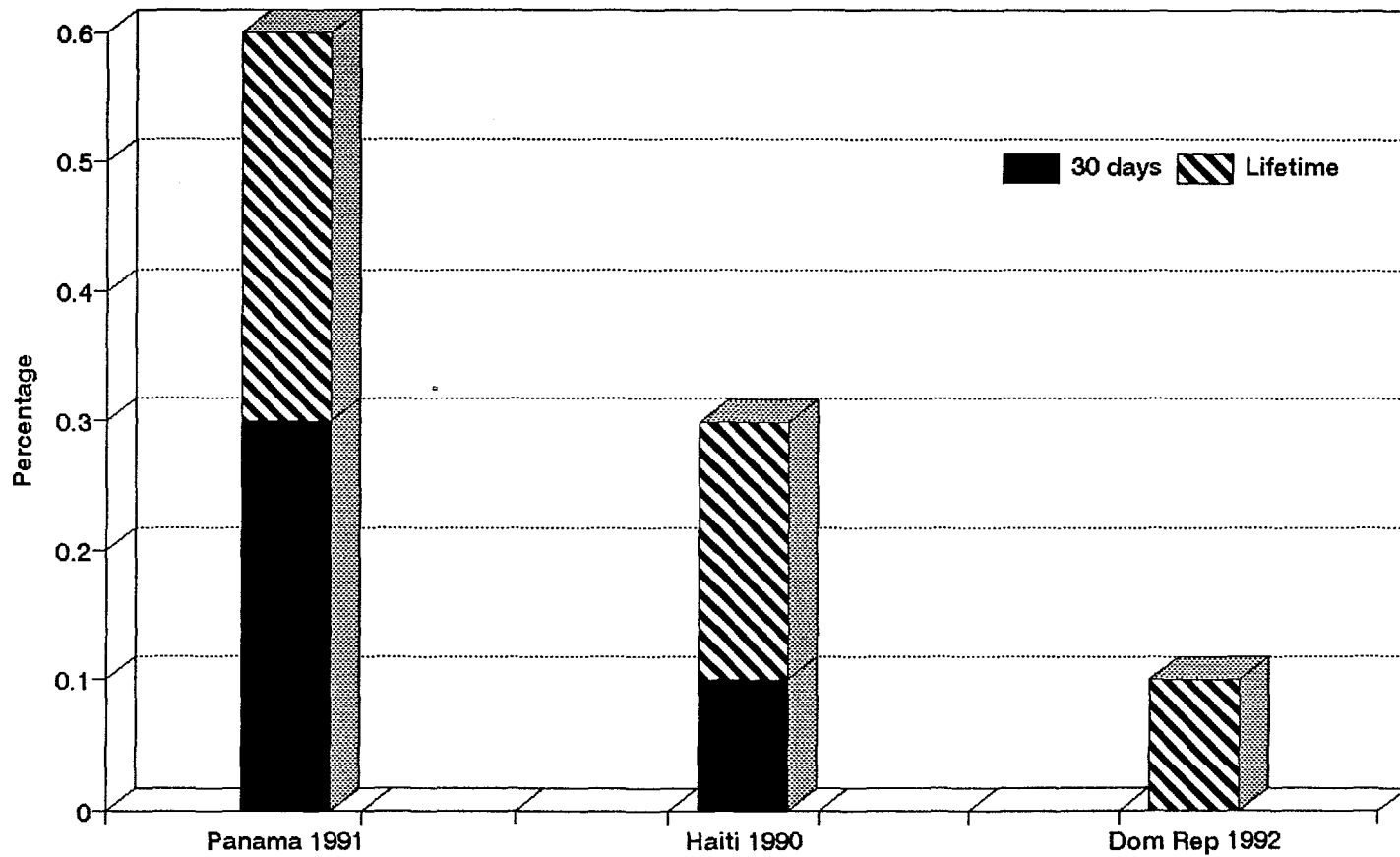
Figure 18
Prevalence of Cocaine Use by Locality in Latin American and Caribbean Countries

* Data on 30-day prevalence not available, national sample of 15 years and over, rural areas included

Figure 19

Prevalence of Cocaine Use by Age Groups in Latin American and Caribbean Countries

Figure 20

Percentage of Lifetime Users of Cocaine by Age at First Use
in Latin American and Caribbean Countries

Percentage

| <12 | 15-19 | 25-29 | 35-39 |
| 12-14 | 20-24 | 30-34 | |

Panama 1991

| 15-19 | 25-29 | 35-39 |
| 12-14 | 20-24 | 30-34 | 40-45 |

Guatemala 1990

| <12 | 15-18 | 25-29 | 35-39 |
| 12-14 | 19-24 | 30-34 | 40-45 |

Peru 1986

| <12 | 15-19 | 25-29 |
| 12-14 | 20-24 |

Dom Rep 1992

| 19-24 | 30-34 | 40-44 |
| 15-18 | 25-29 | 35-39 |

Haiti 1990
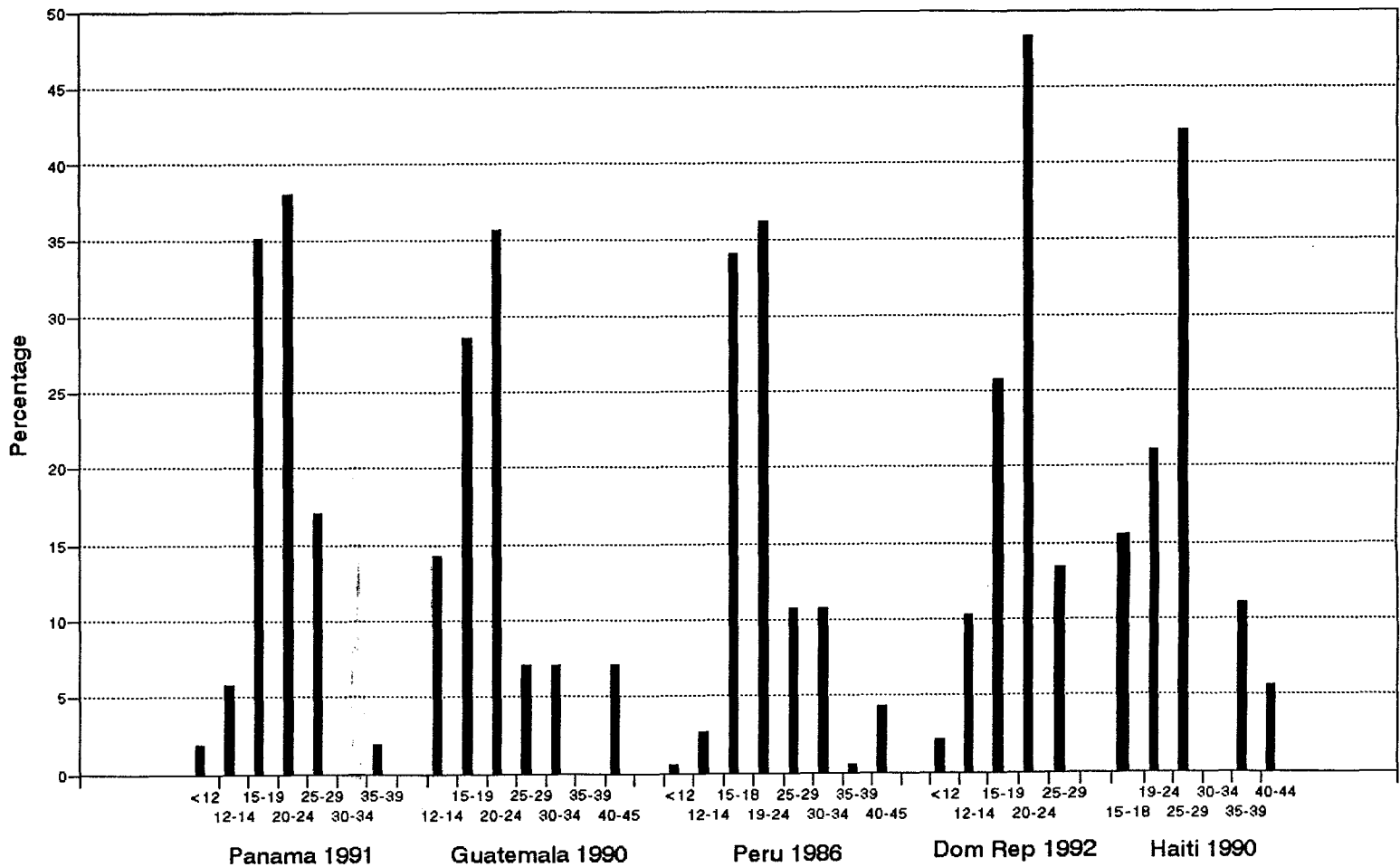
Figure 21
Prevalence of Cocaine Paste Use (Bazuco) in Latin American Countries
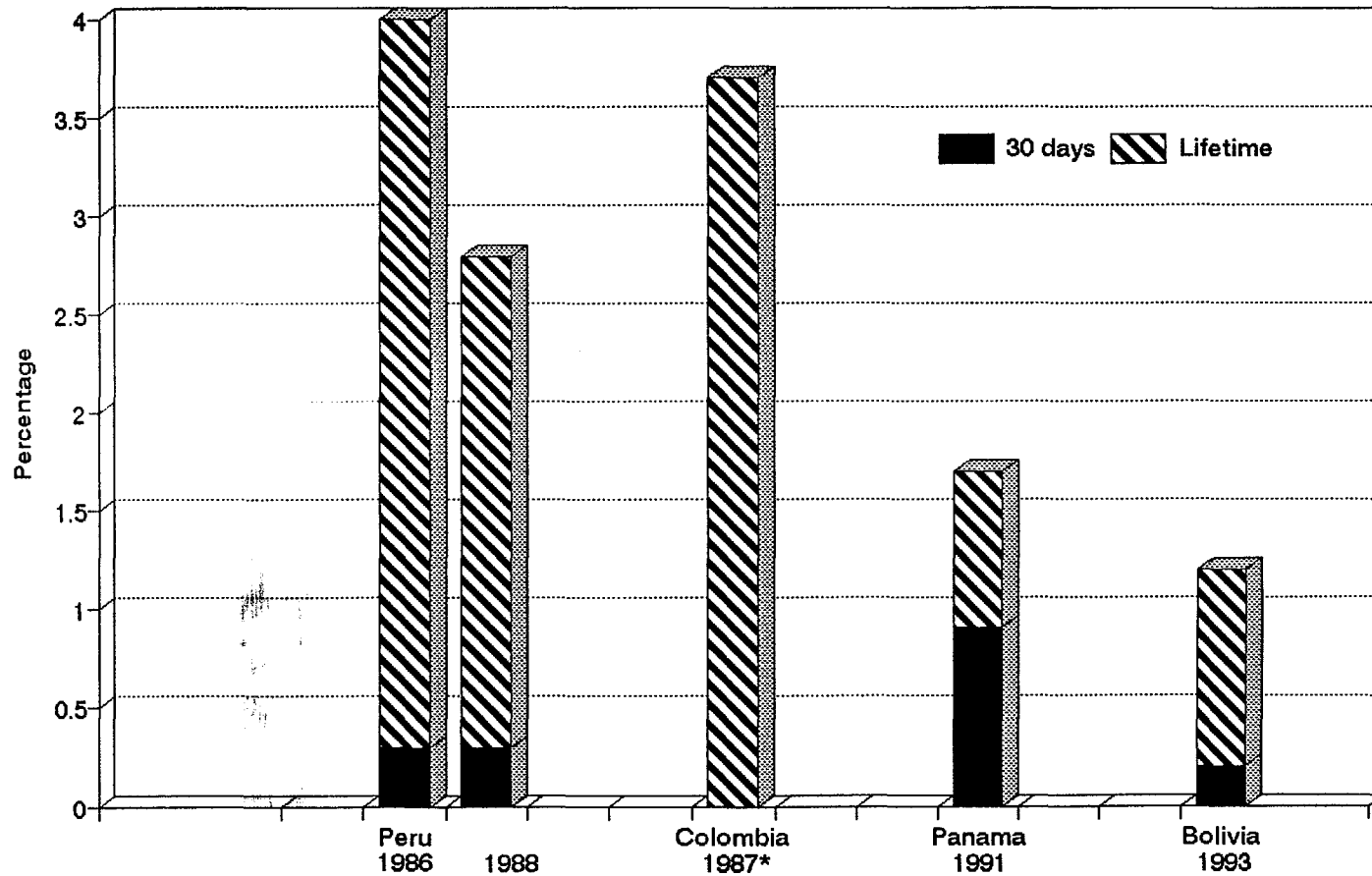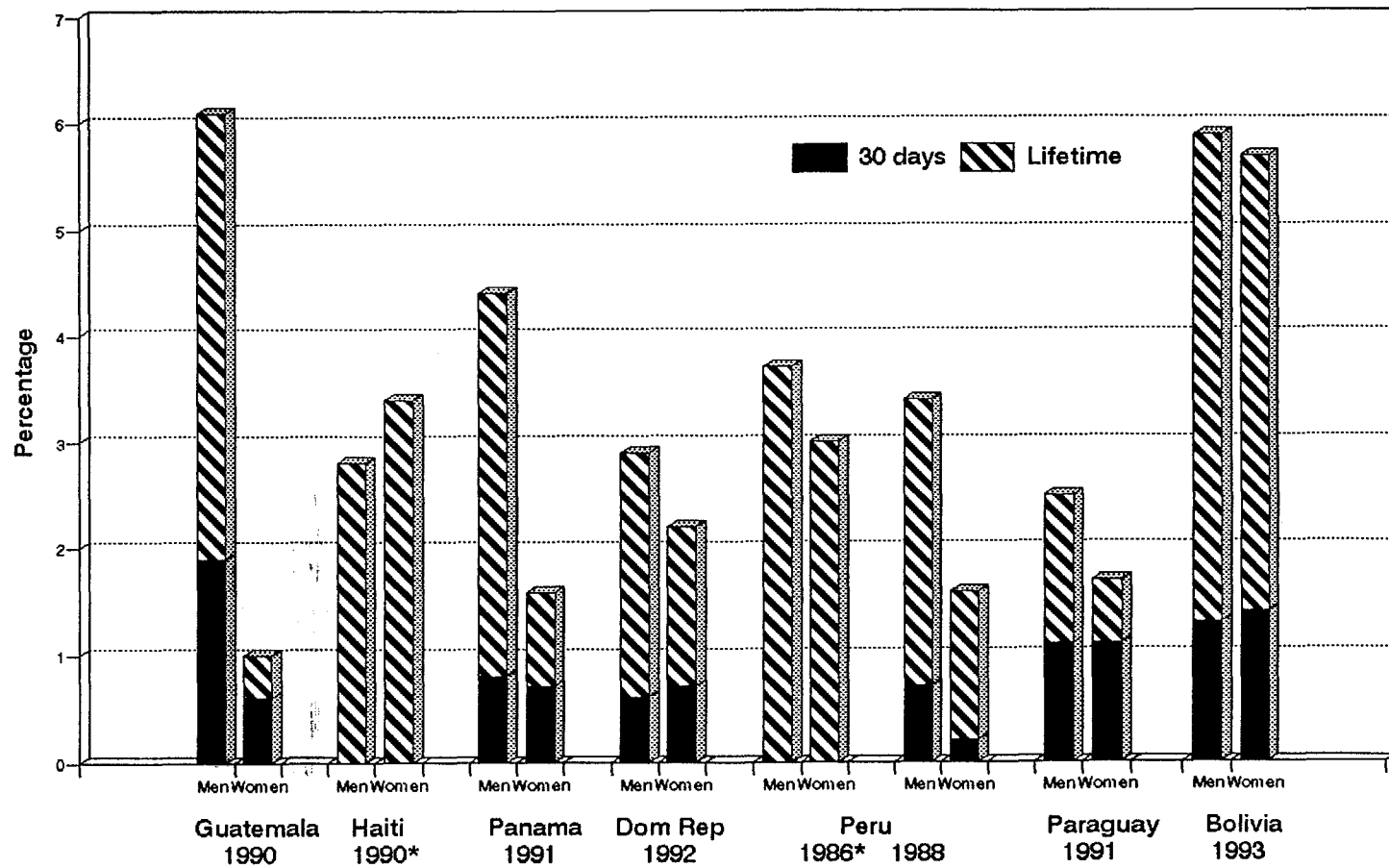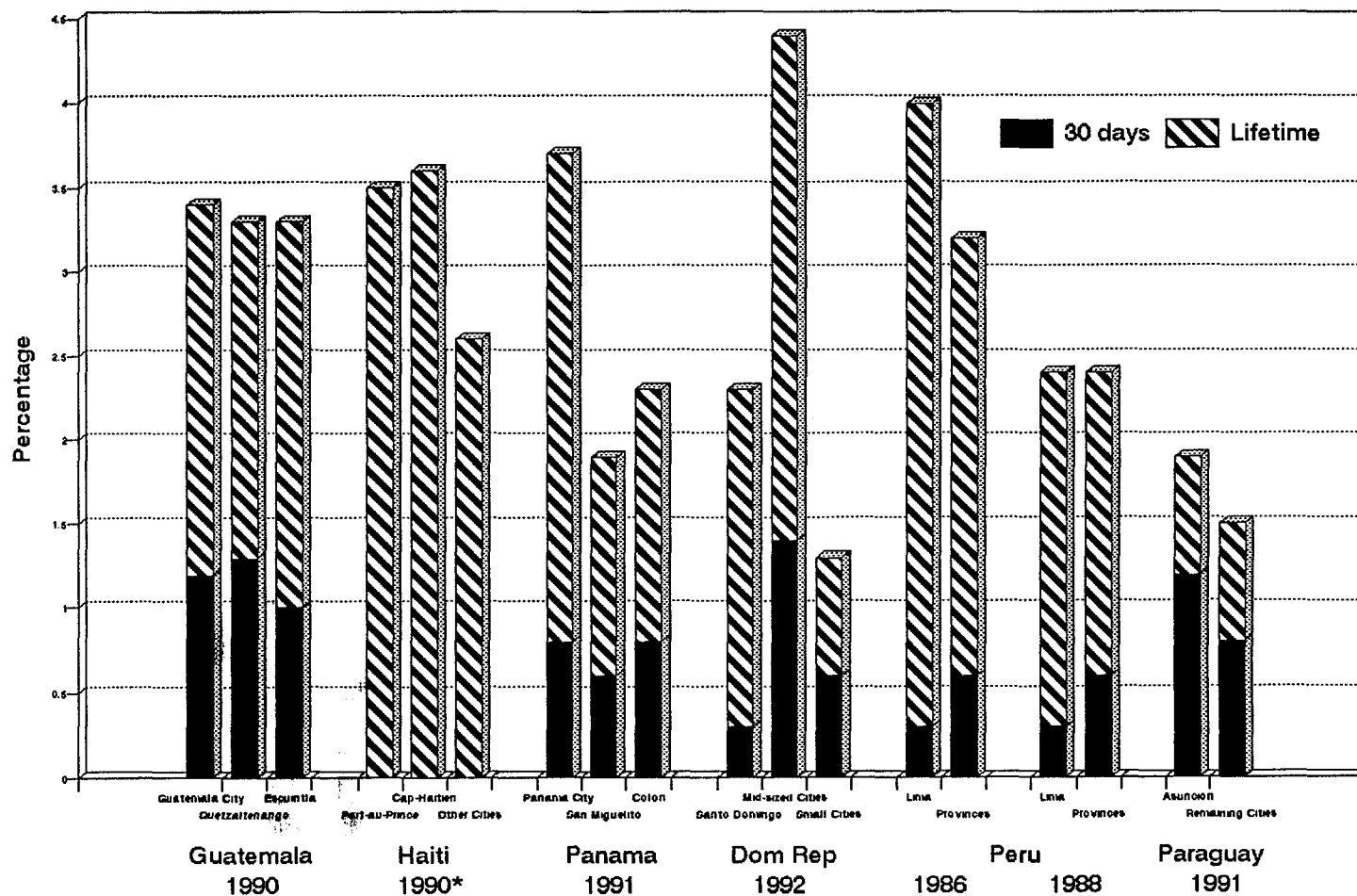

* Data on 30-day prevalence not available

Figure 22
Prevalence of Cocaine Paste Use (Bazuco) by Gender in Latin American Countries
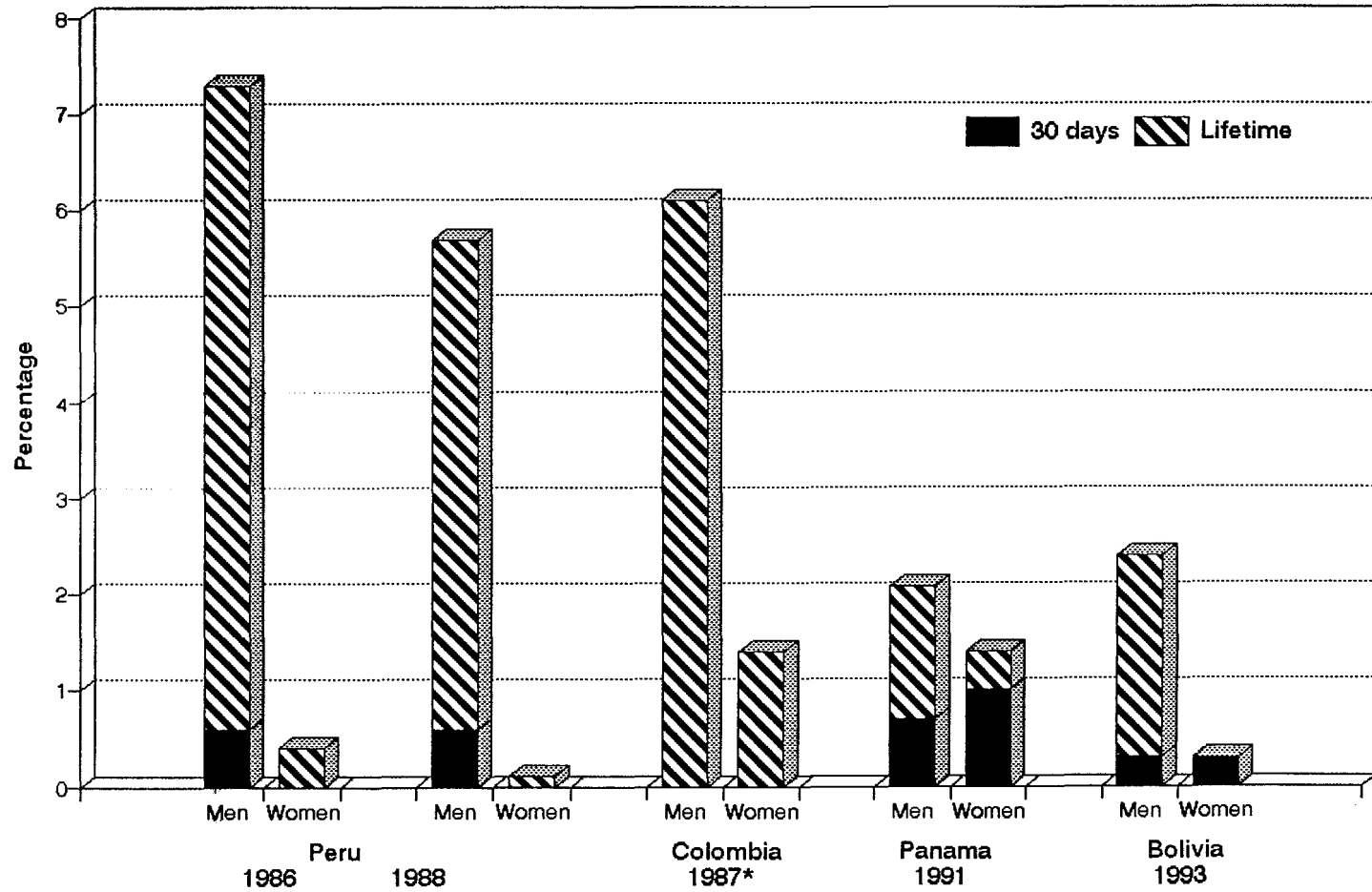
* Data on 30-day prevalence not available

Figure 23
Prevalence of Cocaine Paste Use (Bazuco) by Locality in Latin American Countries
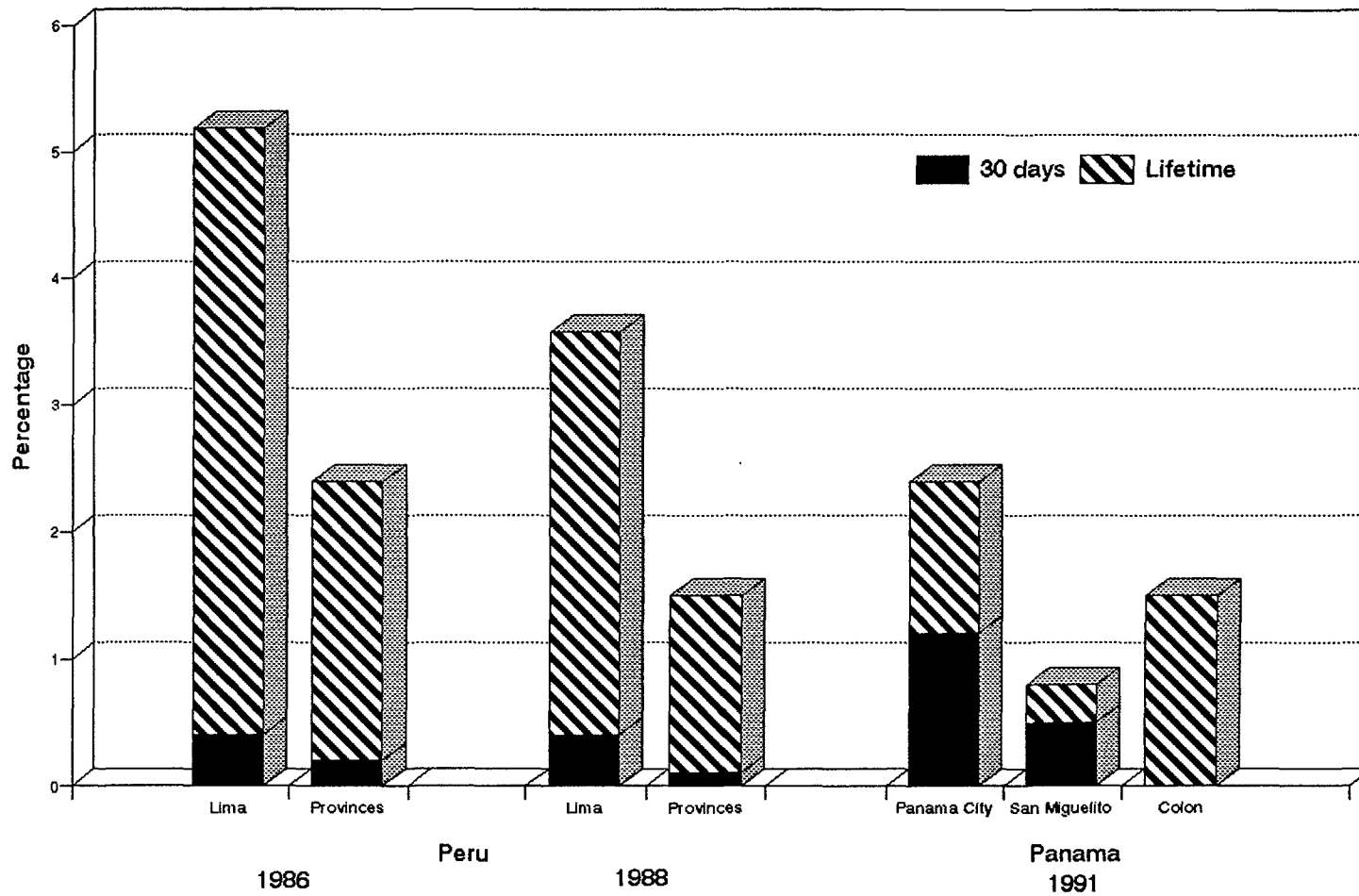
51

Figure 24
Prevalence of Cocaine Paste Use (Bazuco) by Age Groups in Latin American Countries
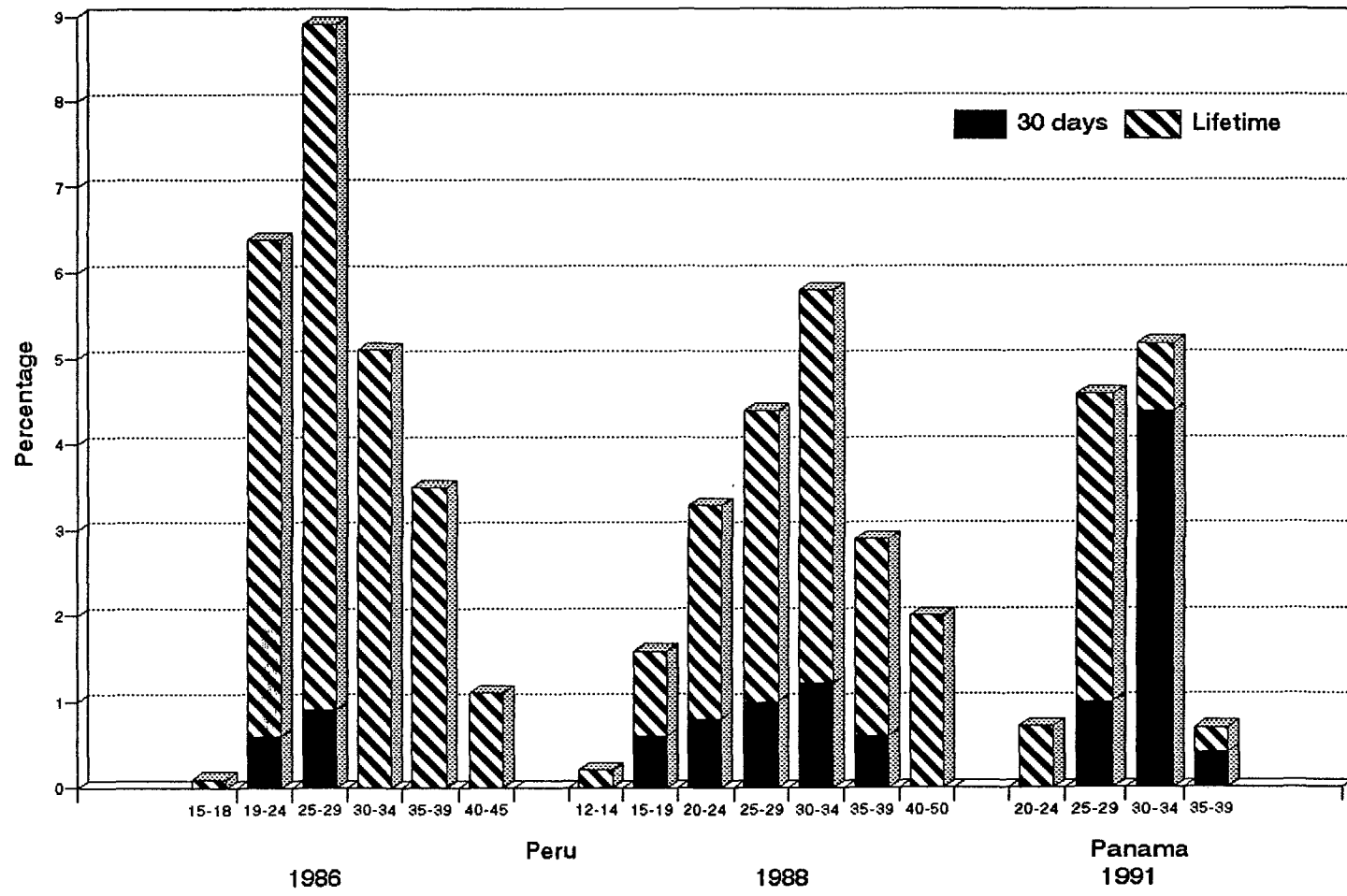
Figure 25

Percentage of Lifetime Users of Cocaine Paste (Bazuco)
by Age at First Use in Latin American Countries

Peru 1986   Panama 1991
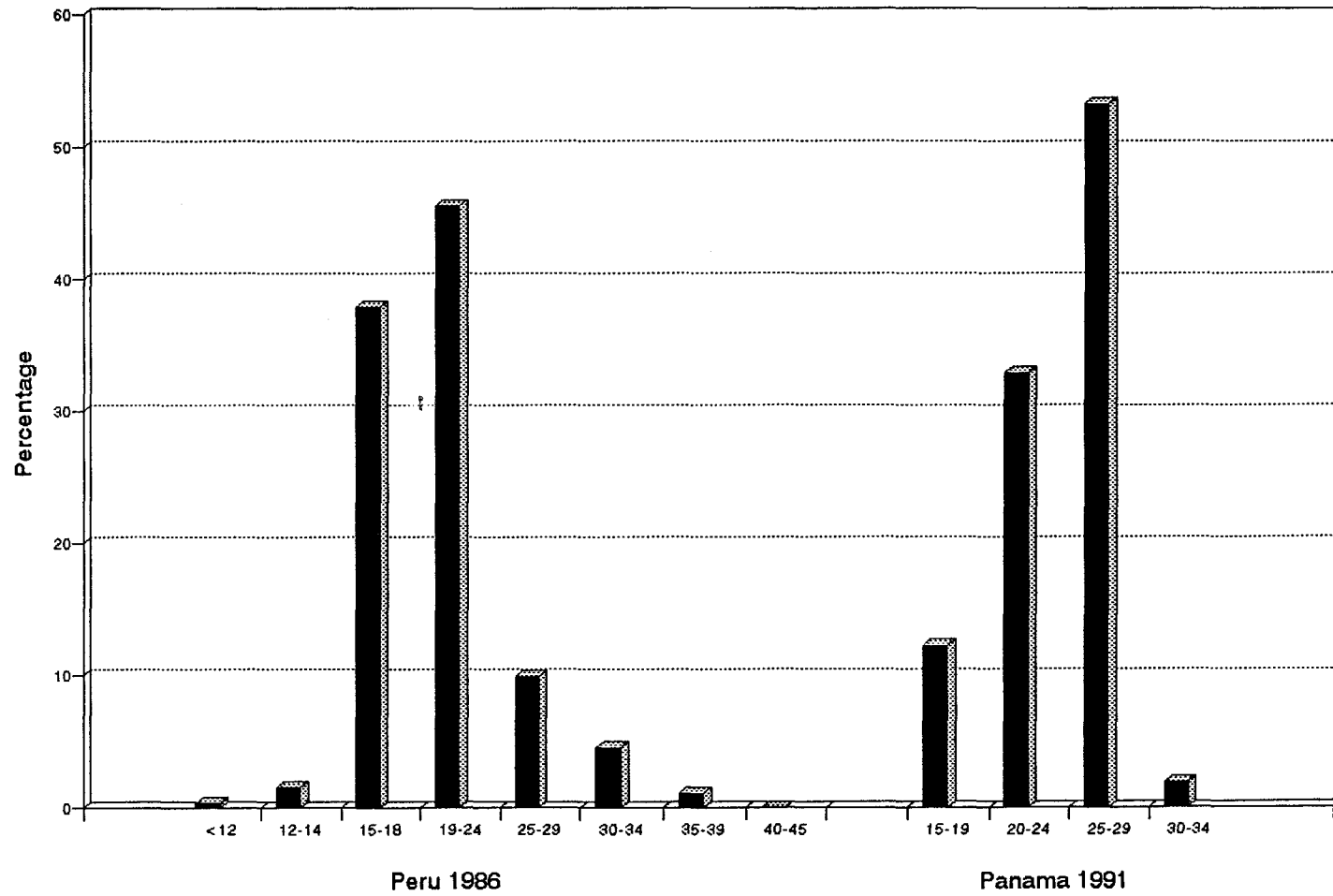
Figure 26

Prevalence of Crack Use in Latin American and Caribbean Countries

Figure 27

Prevalence of Inhalant Use in Latin American and Caribbean Countries
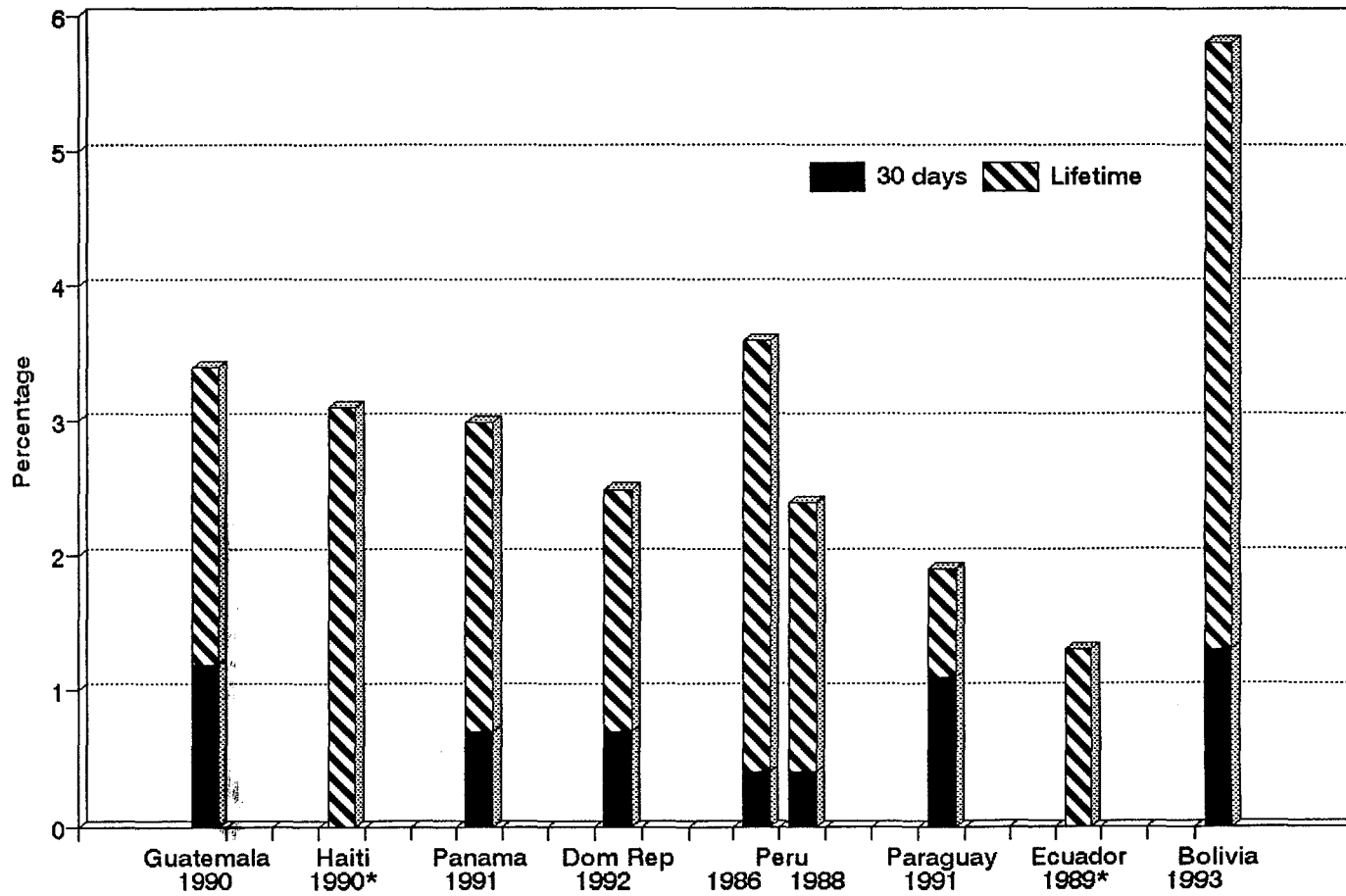
* Data on 30-day prevalence not available

Figure 28

Prevalence of Inhalant Use by Gender in Latin American and Caribbean Countries


* Data on 30-day prevalence not available

Figure 29
Prevalence of Inhalant Use by Locality in Latin American and Caribbean Countries

* Data on 30-day prevalence not available

Figure 30
Prevalence of Inhalant Use by Age Groups in Latin American and Caribbean Countries
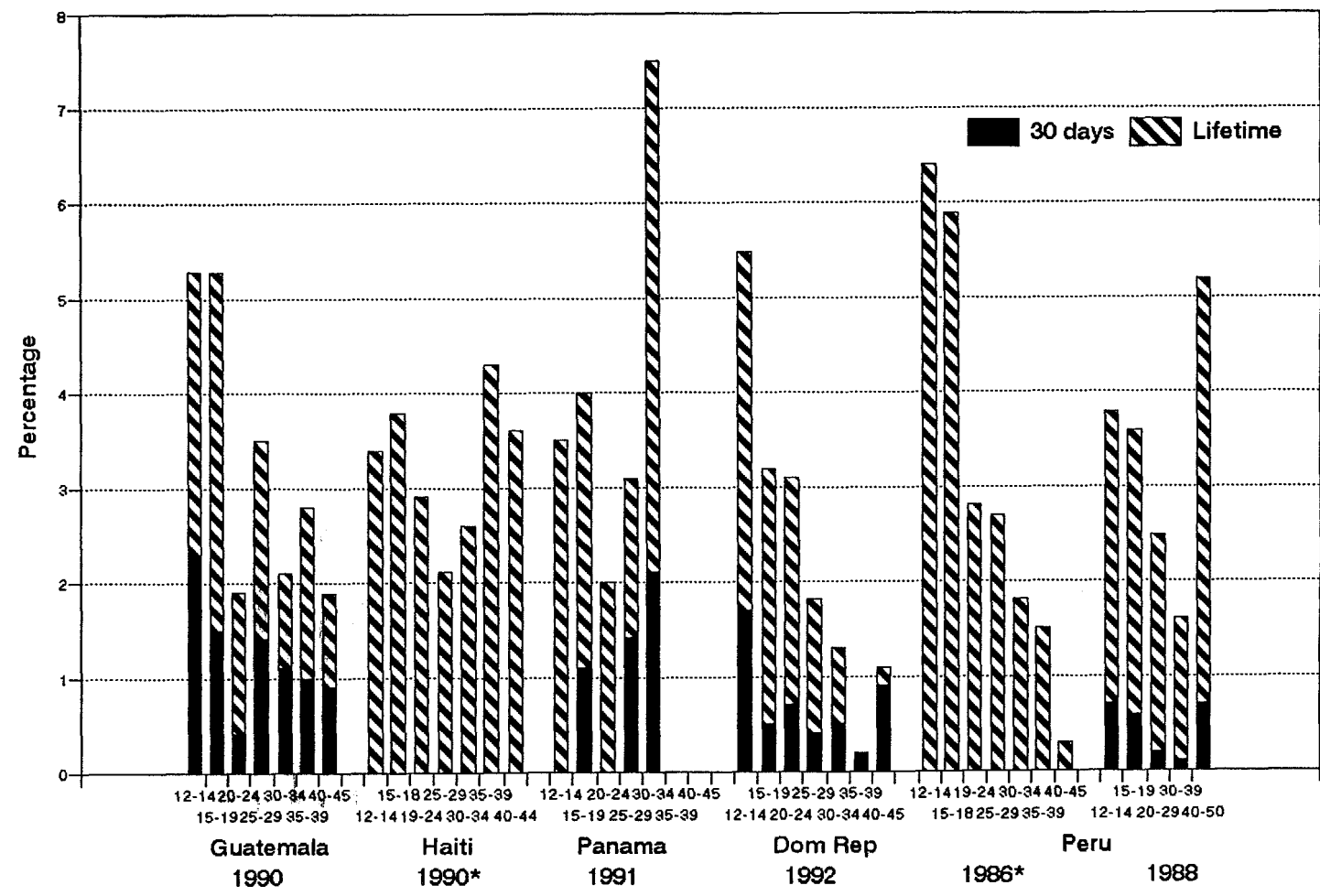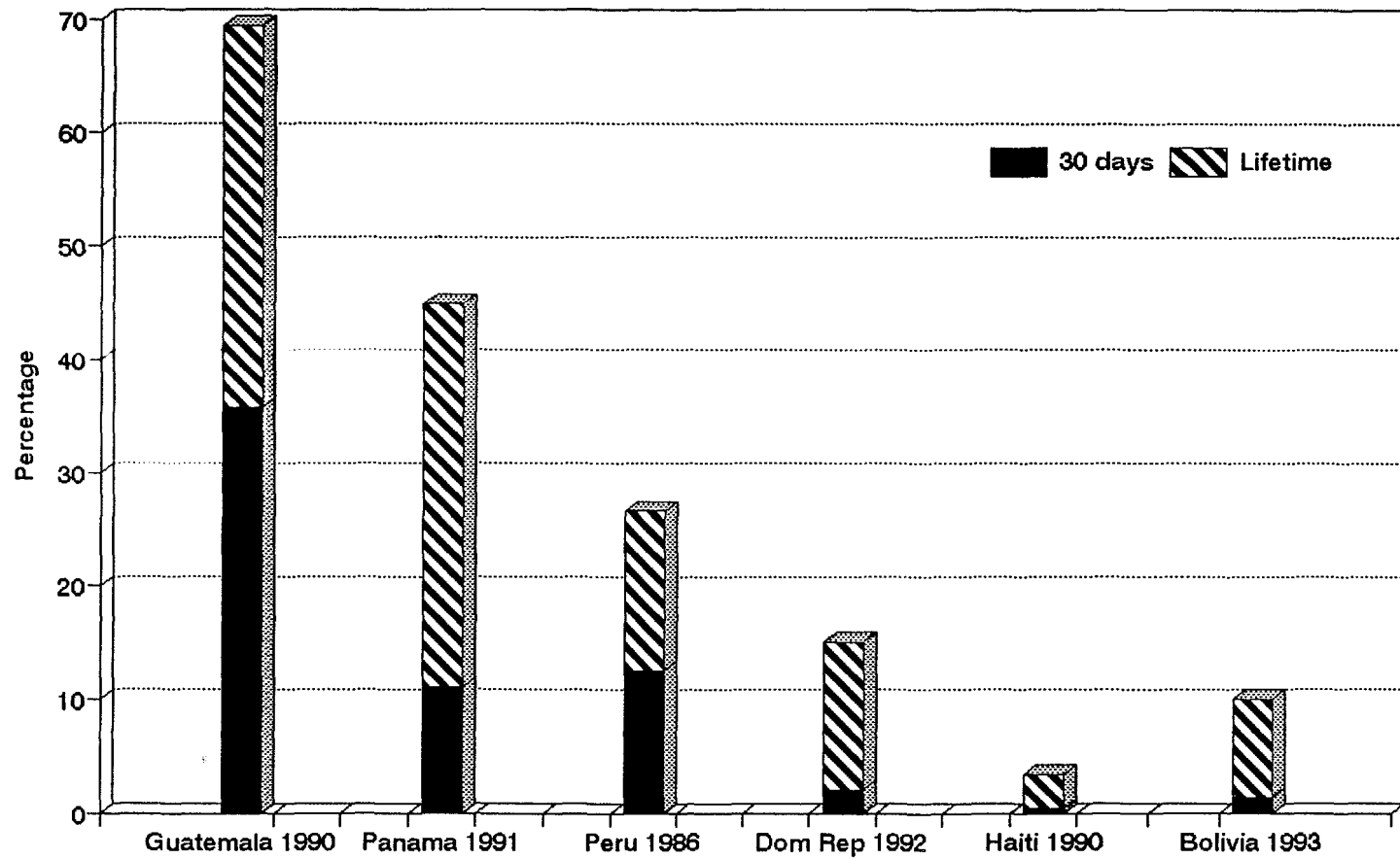

* Data on 30-day prevalence not available

Figure 31

Percentage of Lifetime Users of Inhalants by Age at First Use
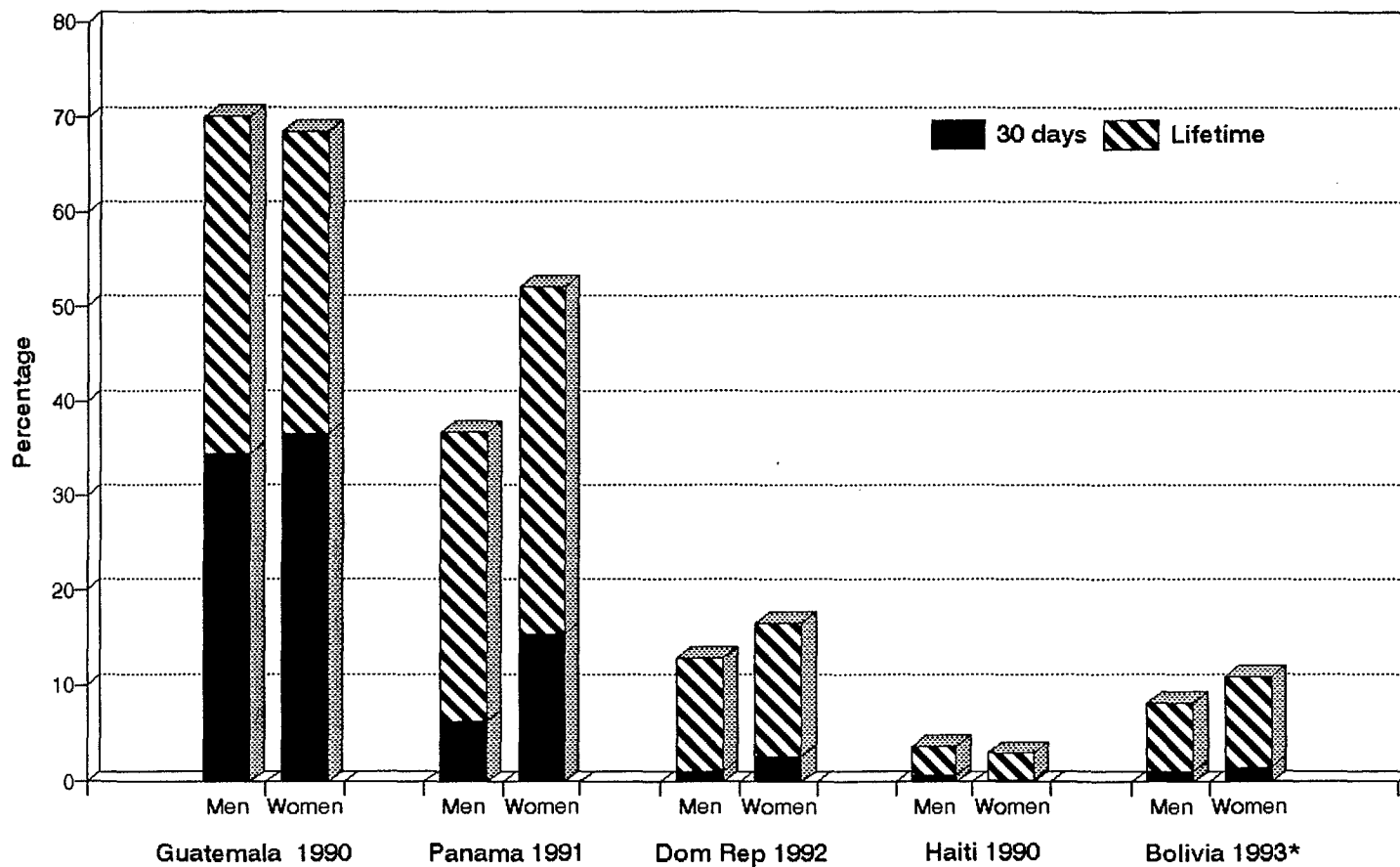in Latin American and Caribbean Countries
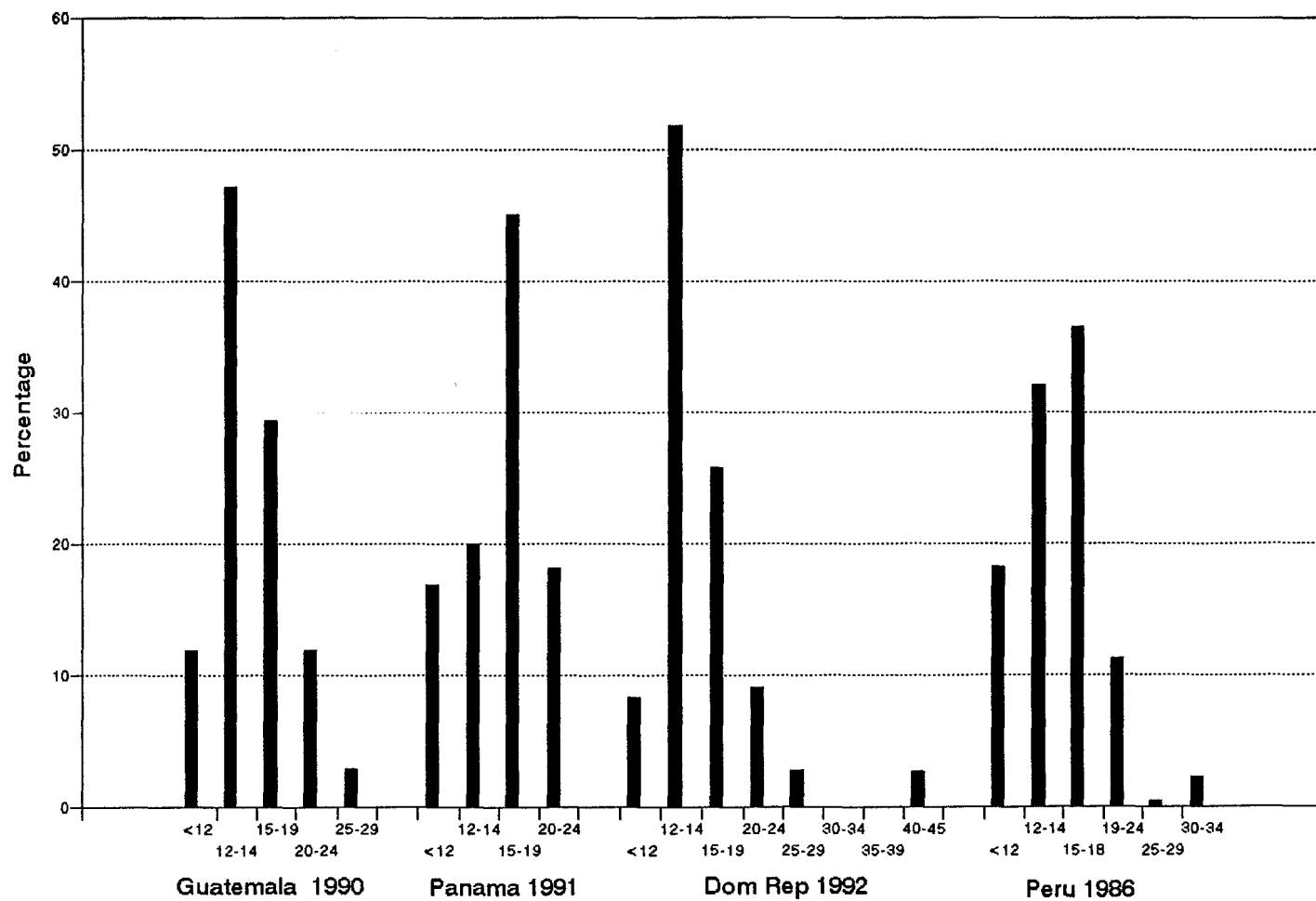
Figure 32
Prevalence of Pharmaceutical Use in Latin American and Caribbean Countries

* Excludes Stimulants

Figure 33

Prevalence of Pharmaceutical Use by Gender in Latin American and Caribbean Countries

* Excludes Stimulants

Figure 34

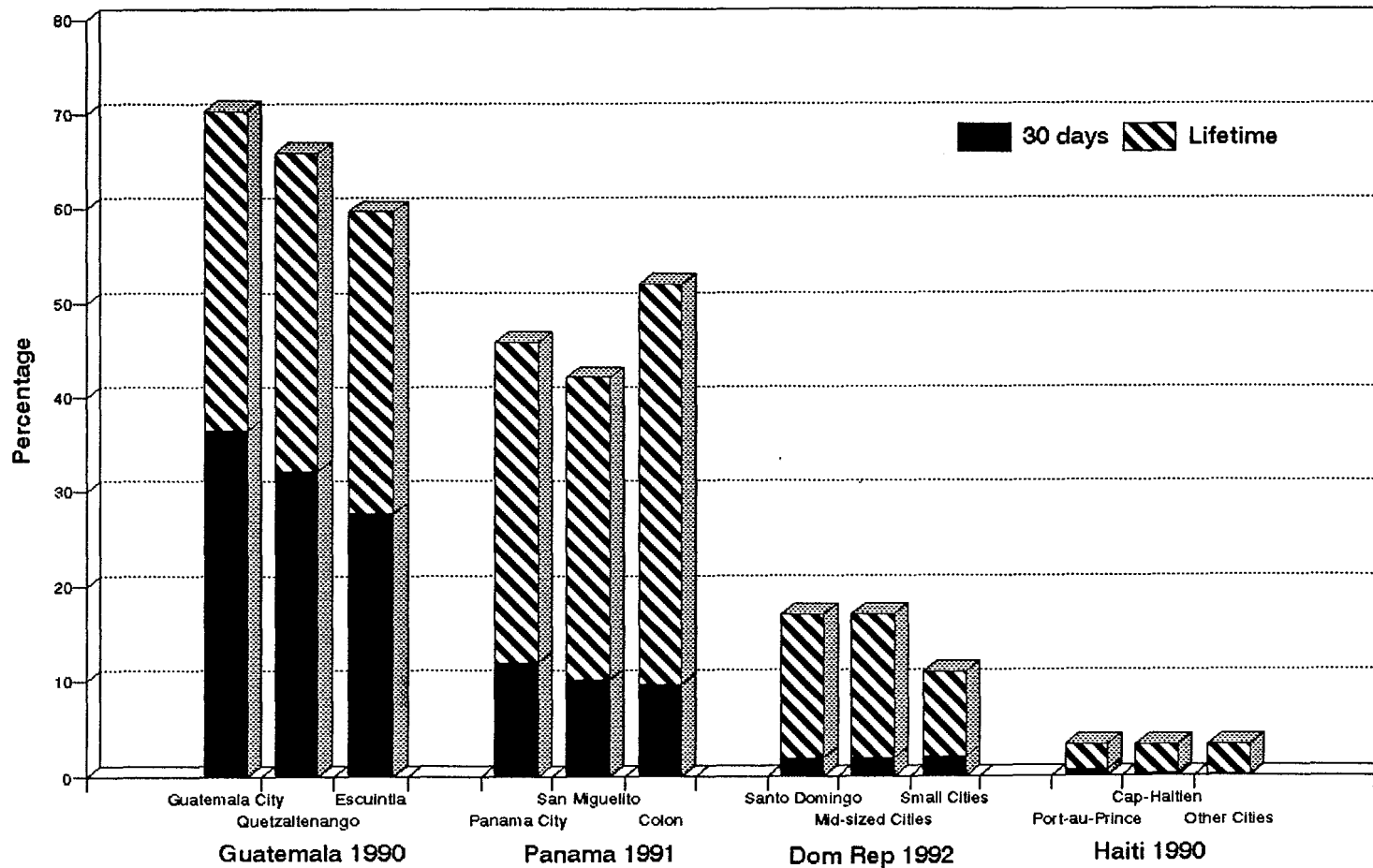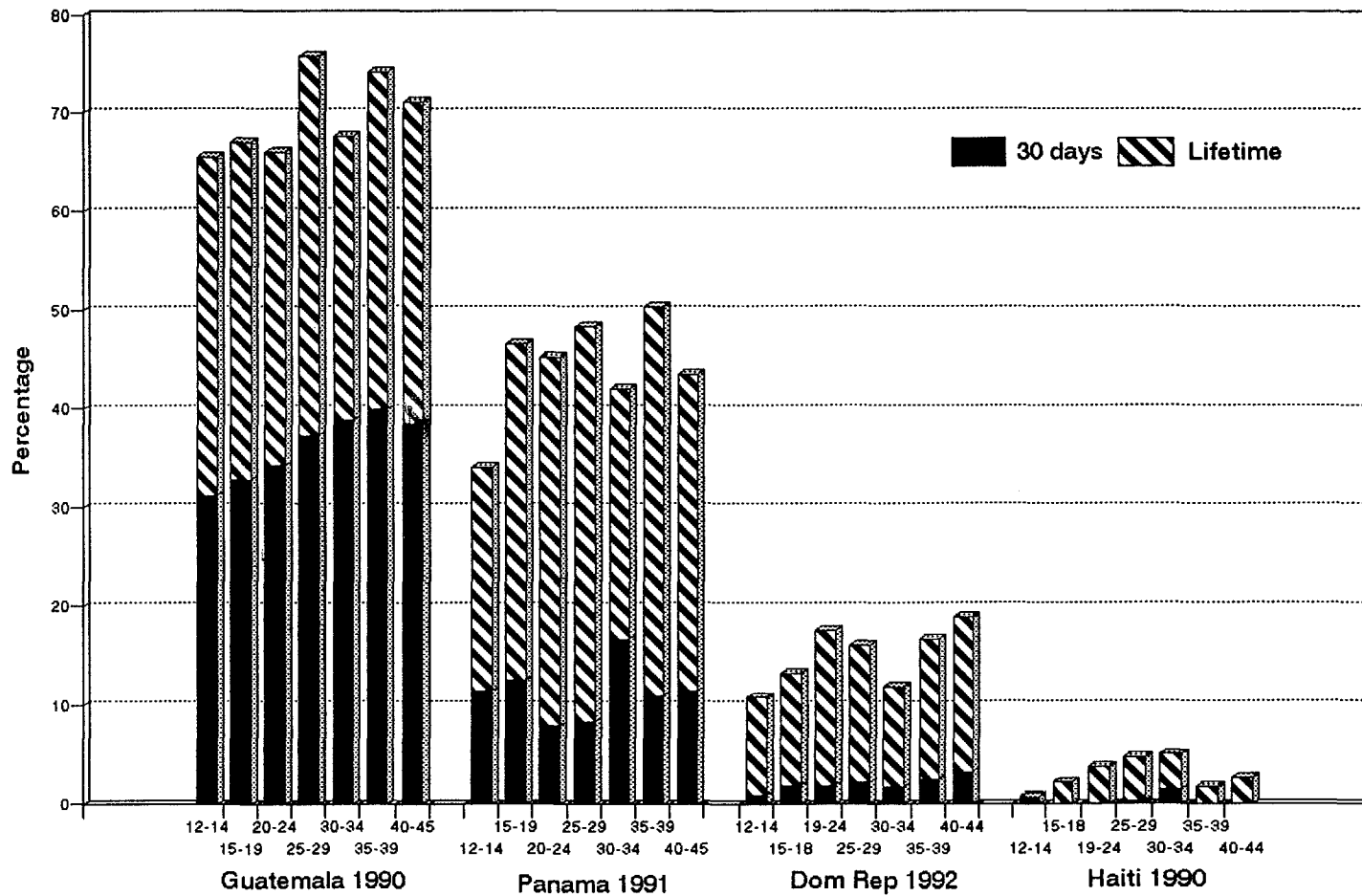Prevalence of Pharmaceutical Use by Locality in Latin American and Caribbean Countries
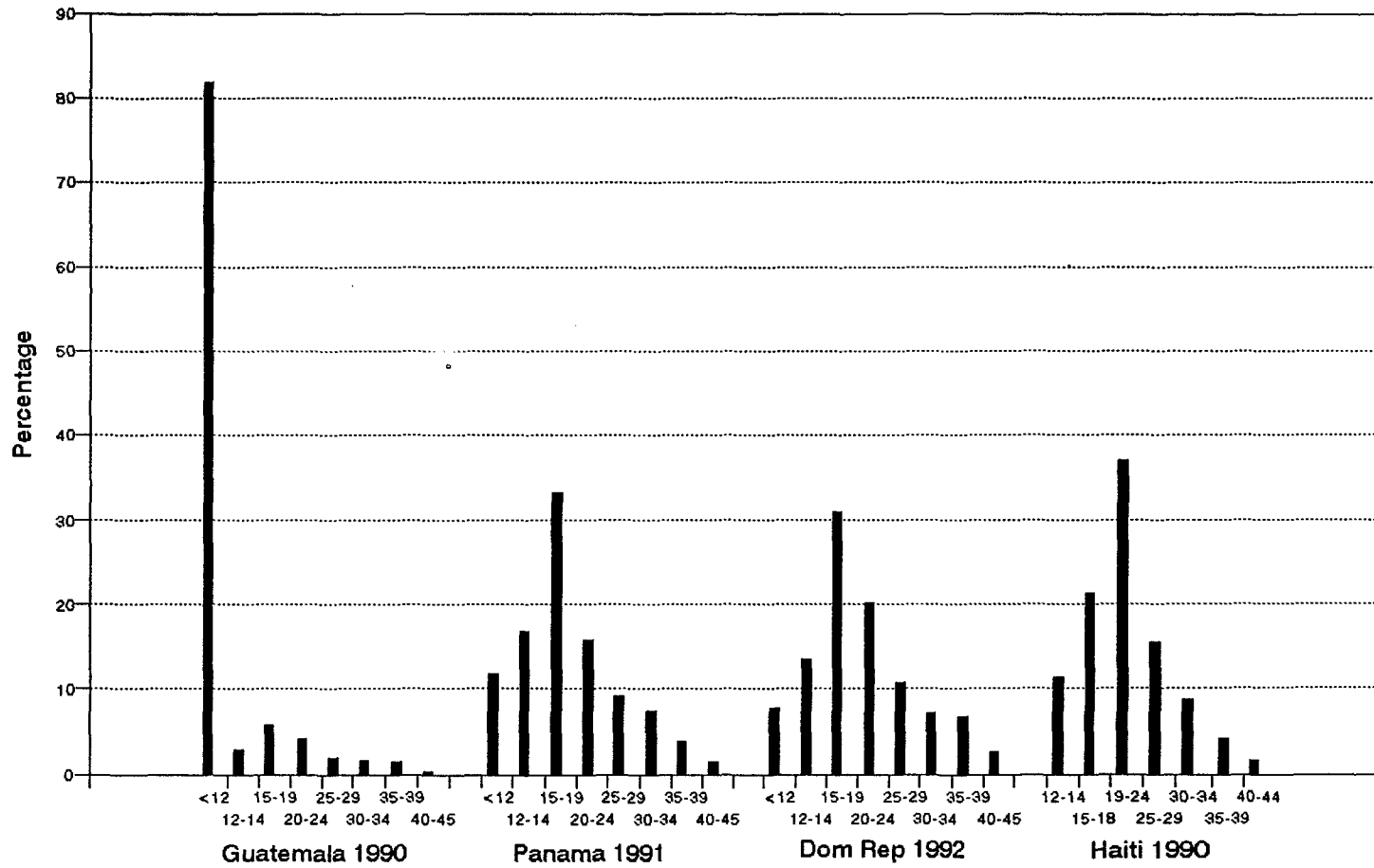
Figure 35

Prevalence of Pharmaceuticals by Age Groups in Latin American and Caribbean Countries

Figure 36
Percentage of Lifetime Pharmaceutical Users by Age at First Use
in Latin American and Caribbean Countries

Percentage

90
80
70
60
50
40
30
20
10
0

| <12 | 15-19 | 25-29 | 35-39 |
| 12-14 | 20-24 | 30-34 | 40-45 |

Guatemala 1990

| <12 | 15-19 | 25-29 | 35-39 |
| 12-14 | 20-24 | 30-34 | 40-45 |

Panama 1991

| <12 | 15-19 | 25-29 | 35-39 |
| 12-14 | 20-24 | 30-34 | 40-45 |

Dom Rep 1992

| 12-14 | 19-24 | 30-34 | 40-44 |
| 15-18 | 25-29 | 35-39 |

Haiti 1990

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