CICAD Meeting with the Universities of the Americas Concerning the Drug Phenomenon Focusing on the Use of Scientific Evidence

### DRUG USE AMONG STUDENTS AND ITS RELATIONSHIP WITH MALTREATMENT DURING CHILDHOOD, IN SEVEN UNIVERSITIES IN LATIN AMERICA AND THE CARIBBEAN CICAD/CAMH Group 2010/2011



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THE PARTY NAMED IN COLUMN

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### Introduction

- § It is widely recognized that the consumption of alcohol and other licit and illicit drugs is an international public health problem, and should be approached from two different and yet complementary perspectives.
  - 1. Supply Reduction
  - 2. Demand Reduction

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S This study is aimed at facilitating demand reduction



#### **Introduction** (cont'd)

Research has identified that an exposure to childhood maltreatment is a risk factor for drug use.

(Kilpatrick et al, 2000; Gilbert, 2009).



§ However, there is a paucity of research in this area from Latin America and the Caribbean.

§ In Latin America and the Caribbean 40 million children under the age 15 years, suffer from violence, abuse and neglect within the family. (UNO, ECLAC & UNICEF, 2009).



### **Introduction** (cont'd)

- The culture of this region increases the risk of child maltreatment.
- § Traditionally, macho culture, with its coercive and authoritarian aspects, views children as inferior beings and the property of adults.



§ In the region, over 50% of adults consider it normal to maltreat minors as a form of education, discipline and punishment (UNO, ECLAC & UNICEF, 2009).



§

#### **Introduction** (cont'd)

The purpose of our research is to determine the relationship between drug use and child maltreatment among university students.



§ The results will help to inform childhood maltreatment preventative programs within Latin America and the Caribbean.



### **Justification**

§ Drug-related problems impact not only individuals (health problems) but also society (generating violence, social disintegration, family and financial problems).



S Latin America and the Caribbean are not simply producers but are also consumers of alcohol and other licit and illicit drugs.



### **Justification (cont'd)**

§ A recent survey conducted by CAMH & CICAD/OAS in Latin America and the Caribbean, highlighted the high prevalence of illicit and licit drug consumption among university students

(CICAD-CAMH, unpublished manuscript ).



### **Justification (cont'd)**

- § In one Latin American university, 68% of the students reported drug use within the last 12 months.
- S This population is of significant importance, as they are the future leaders of society.



### **Justification (cont'd)**

S This has brought to the forefront the need to identify the risk factors associated with drug use in Latin America and the Caribbean University Students.



### Literature Review: Drug Use and Abuse

- Drug use is the use of any psychoactive substance, whether licit or illicit.
- Drug abuse is the recurrent use of a substance, over a 12 month period, that results in one or more of the following:
  - an individual being unable to meet their obligations at work, home or school;
  - Ø repeated use in hazardous situations;
  - Ø repeated use resulting in legal problems; and
  - repeated use despite it causing or exacerbating social problems.
    (DSM-IV TR, 2000)



- Drug use and abuse has been found to be influenced by:
- 1. Personal Characteristics,
- 2. Environmental Factors &
- 3. Social Relationships (Family)

### **1. Personal Characteristics**

S Personal characteristics such as a good selfimage and sense of self worth can act as protective factors against drug use.

(Rodríguez-Kuri and Pérez-Islas, 2002)

Psychological distress (anxiety and depressive symptoms) is a risk factor for tobacco use.

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(Hagman, Delnevo, Hrywna, & Williams, 2008)

# **1. Personal Characteristics**

Some individuals have a genetic predisposition that makes them more likely to progress to drug abuse than others.

(Ogborne, 2004; Kendler, et al., 2008; Crabbe, 2002).



### 2. Environmental Context

Socioeconomic status: Lower incomes associated with drug use.

(Boardman, Finch, Ellison, Williams, & Jackson, 2001).

§ People who are more religious were found to be less likely to use substances.

> (National Center on Addiction and Substance Abuse at Columbia University, 2001).



### **3. Social Relationships (Family)**

S The family acts as both a protective and risk factor for drug usage.

(Matthew & Pillon, 2004).



#### **Family Protective Factors**

- § Living within a two parent household.
- **§** Presence of a cohesive and nurturing family.

(Munoz & Grana, 2001)



Parental monitoring of adolescents.

(Barnes, Hoffman, Welte, Farrell, and Dintcheff, 2006)



#### **Family Risk Factors**

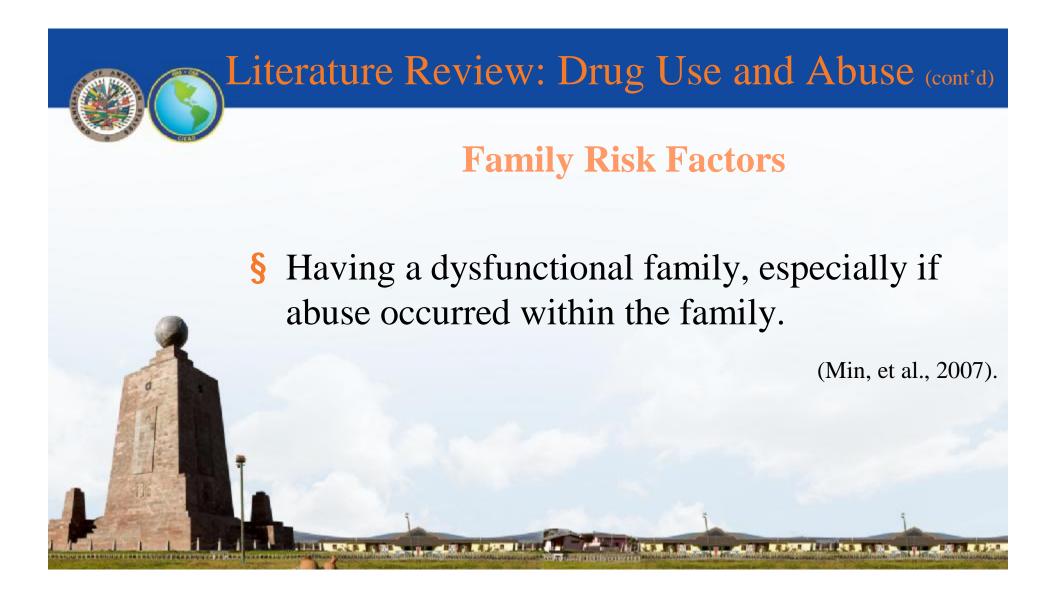
S The use of alcohol by the father or habitual use of tranquilizers by the mother.

(Muñoz Rivas & Graña López, 2001).



§ Inconsistent family rules, family conflict, and distant family relationships.

(García-Aurrecohechea, Diaz Guerrero, Reyes Lagunes, Medina Mora, Andrade Palos, & Reidl Martinez, 2006).



### Literature Review : Child Maltreatment

"Any acts of commission or omission by a parent or other caregiver that result in harm, potential for harm, or threat of harm to a child, even if harm is not the intended result"

(Gilbert et al., 2009).



#### §The types of maltreatment of interest:

- Physical abuse
- Sexual abuse
- Emotional abuse
- Neglect (physical and emotional)



### Literature Review : Child Maltreatment (cont'd)

Maltreated adolescents are four times more likely to report drug use.

(Jun, Rich-Edwards, Boynton-Jarrett, 2008; Thornberry, Henry, Ireland, Smith, 2010).

§ Females are more likely to be abused, however males and females were found to be equally affected by the experience of abuse.

(Brems, Johnson, Neal, & Freemon, 2004).



S Maltreated young people are more likely to use drugs as a means of coping with the trauma of being abused. (Yoast & McIntyre, 1991).



### **Research Objectives**

#### **General Objective**

To examine the relationship between drug use/ abuse and childhood maltreatment among students from seven universities in Latin America and the Caribbean.





### **Specific Research Objectives**

- 1. To estimate the prevalence of licit and illicit drug use among selected university students.
- 2. To estimate in the frequency of students who have experienced child maltreatment.



3. To determine the relationship between drug use /abuse and maltreatment during childhood among selected university students.



### **Hypothesis**

"University students who use and abuse drugs are more likely to have experienced childhood maltreatment than those who do not use drugs."

#### **Sub-hypotheses:**



#### A. Drug use and childhood maltreatment

There is a significant relationship between drug use and childhood maltreatment.

#### **B. Drug abuse and childhood maltreatment.**

S There is a significant relationship between drug abuse and childhood maltreatment.

#### **Ethical Considerations**





### Methodology

Research design: Cross-sectional survey design

#### Sample recruitment

*Target population* : entire university or a selected faculty



**q** The original design was to use random sampling, however this proved to be impossible for some countries and those countries used *non-probability sampling* techniques instead.



### **Methodology: Sample Size calculation**

S The sample size was calculated using the known percentage of drug consumption in the participating universities. This data were obtained from previous research that was conducted in some of the participating universities (CICAD-CAMH, unpublished manuscript ).



### Methodology

#### **Inclusion Criteria**

- § Must be at least eighteen years old.
- **§** Registered in the participating university

#### **Exclusion criteria**

Students who have previously completed the research questionnaire.



### **Measurements and Instruments**

- S The research questionnaire **è** 60 questions; 20 minutes to complete.
- § Four main instruments :
  - 1. Adverse Childhood Experiences questionnaire (ACE) (CDC, 2010)
  - 2. Kessler Psychological Distress Scale (K10) (Kessler, 2003)
  - 3. Selected questions from the *CICAD drug use questionnaire*.
  - 4. Socio-demographic questions.





# Administering the Questionnaires

- 5 Students were given the details about the study and were not required to give any identifying information .
- Ø The students signed an informed consent prior to the distribution of the questionnaires.



Upon completing the questionnaire the students were thanked for their participation.



### **Data Analysis**

§ Data was entered into a SPSS Database.

§ A sample of 10% of the questionnaires were entered twice, to determine possible inconsistencies.



### Data Analysis

Data analyses consisted of :

- § Descriptive statistics
- § Bivariate tests (Chi-square)

#### § Logistic regression analyses

Found to be appropriate even though multiple sampling techniques were used

(Kessler et al., 2007)



### **Results:- Sample**

Country	Frequency	Percent	
Colombia	616	26.9	
Jamaica	382	16.7	
Nicaragua	360	15.8	
Panama	377	16.5	
El Salvador	269	11.8	
Uruguay	281	12.3	
Το	tal 2285	100.0	



### **Results: -Sample**

- § 2285 university students between the ages 18-48 years.
- § 59% female and 41% Male
- § 74.1% reported urban origins while 25.9 % reported rural origins.



#### **Results :- Sample**

- Sonly 14.9 % believed they were maltreated, however 82.6% of the sample met the criteria of being maltreated.
- § 80 % of those who reported <u>not</u> being maltreated met the criteria of being maltreated.



#### Results: -Maltreatment by Gender

Maltreatment	Male (%)	Female (%)	Total (%)
Sexual Abuse	3.0	8.2	6.1
Physical Abuse	34.9	33.2	33.9
<b>Emotional Abuse</b>	28.2	32.0	30.4
<b>Overall Neglect</b>	65.7	67.0	66.5
Any Maltreatment	80.8	83.8	82.6

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## **Results:- Psychoactive Substance Use**

_	Substance Use					
<b>Type of Substance</b>	Past Year	<b>Past 30 days (%)</b>				
Cannabis	19.1	8.5				
Tobacco / cigarettes	30.8	22.2				
Alcohol	59.8	45.6				
Cocaine	4.9	1.7				
Ecstasy	2.1	1.1				
Heroine	1.5	0.8				
Inhalants	2.8	1.5				
Non-prescribed	7.0	4.1				
prescription drug use						



## **Results: - Psychological Distress**

### **Reported Levels of Psychological Distress**

	Total	2280	100.0	
	Severe	519	22.8	1
	Moderate	244	10.7	1
<	Mild	409	17.9	
	Minimal	1108	48.6	
	Distress	f	%	
	Psychological			
	Level of			



## **Results: - Psychological Distress**

§ 27.9% of those who were maltreated experienced moderate-severe psychological distress even though they culturally didn't considered themselves to have been abused.



### **Results: -Psychological Distress**

#### Chi-Square Analysis of Psychological Distress and Maltreatment Variables

		Ν	df	$X^2$	р
	Sexual Abuse	2264	3	25.65	<.001
0	Physical Abuse	2269	3	90.13	<.001
	Emotional Abuse	2272	3	133.48	<.001
	Neglect	2275	3	113.60	<.001

### Results:- Maltreatment & Substance Use

#### Emotional Abuse and Past 12 months Alcohol Use

Variables	Wald Chi-Square	Prob > Chi-Square	Odds Ratio	Lower 95% Confid. Limit for Odds Ratio	Upper 95% Confid. Limit for Odds Ratio
Gender	39.580	0.000	0.514	0.418	0.633
Country	87.552	0.000	0.912	0.872	0.954
Age	0.681	0.409	0.986	0.953	1.020
Emotional Abuse	8.223	0.004	1.380	1.107	1.719
	i			1	1

## Results:- Maltreatment & Substance Use

# Physical Abuse and Past 12 Months Alcohol Use

Variables	Wald Chi-Square	Prob> Chi-Square	Odds Ratio	Lower 95% Confid. Limit for Odds Ratio	Upper 95% Confid. Limit for Odds Ratio
Gender	37.724	0.000	0.520	0.422	0.641
Country	89.703	0.000	0.917	0.877	0.959
Age	1.064	0.302	0.982	0.949	1.016
Physical Abuse	23.487	0.000	1.683	1.364	2.078
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### Results:- Maltreatment & Substance Use

### Physical Abuse and Past 12 Months Cannabis Use

Variables	Wald Chi-Square	Prob> Chi-Square	Odds Ratio	Lower 95% Confid. Limit for Odds Ratio	Upper 95% Confid. Limit for Odds Ratio
Gender	38.261	0.000	0.324	0.226	0.463
Country	61.856	0.000	1.009	0.949	1.073
Age	0.628	0.428	1.020	0.972	1.070
Physical Abuse	8.629	0.003	1.596	1.168	2.179
			No. 1		



## Results:- Substance Abuse & Maltreatment

#### Chi-Square Analysis of Substance Abuse and Maltreatment Variables

		Ν	df	<i>X</i> <sup>2</sup>	р	
	Sexual Abuse	1807	1	0.21	.650	
-	Physical Abuse	1806	1	15.68	<.001	
1	Emotional Abuse	1809	1	0.92	.339	
	Neglect	1811	1	99.76	<.001	



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#### Limitations

- Solution Non-probability sampling techniques were used, therefore the results cannot be generalised.
- § The students provided retrospective data about events that occurred in childhood.

There may be a tendency to under-report or overreport maltreatment and drug use problems.



# **Discussion & Conclusion**

- Many students were not aware that they were maltreated.
- Students who were maltreated during childhood reported higher levels of psychological distress during adulthood.

Alcohol use in the past year was associated with emotional and physical maltreatment.



# **Discussion & Conclusion**

- S Cannabis use in the past year was associated with physical abuse.
- § Physical abuse and overall neglect were found to associated with substance abuse



## Recommendation

S The prevention of child maltreatment should be approached from a cultural and legal perspective, as a demand reduction strategy to reduce substance use in Latin America and the Caribbean. CICAD Meeting with the Universities of the Americas Concerning the Drug Phenomenon Focusing on the Use of Scientific Evidence

# Thank You For Your Attention

#### CICAD/CAMH Group 2010/2011



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