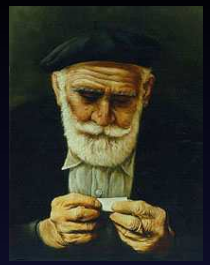
Type of cigarette smoked and COPD prevalence in Latin America: The PLATINO Study

AMB Menezes[1], PC Hallal[1], R Perez-Padilla[2], JR Jardim[3], A Muino[4], MV Lopez[4], G Valdivia[5]

1- UFPEL/Brazil 2- INER/Mexico 3-UNIFESP/Brazil 4-Universidad de la Republica/Uruguay 5-PUC/Chile



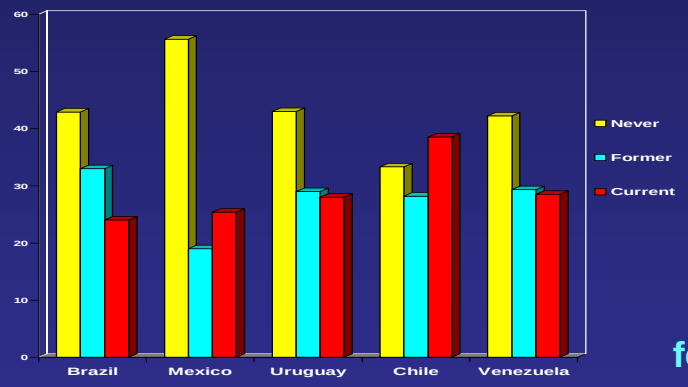
Introduction

COPD is a growing worldwide cause of morbidity and mortality and few data are available on the burden of this disease in Latin America. The role of smoking on COPD prevalence is well known, but few studies have explored the different types of cigarettes and its influence on COPD.

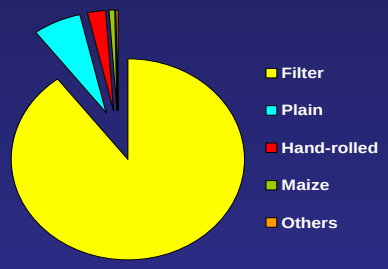
Methods

PLATINO is a multicenter study on COPD prevalence and risk factors in major Latin American metropolitan areas: Sao Paulo (Brazil), Mexico City (Mexico), Montevideo (Uruguay), Santiago (Chile) and Caracas (Venezuela). COPD prevalence was defined as a ratio between FEV1 and FCV below 70% pos-bronchodilator use (FR). The COPD GOLD stages were also evaluated. Comparable multiple stage sampling strategies were used in each city. Adults aged 40 years or above were included.

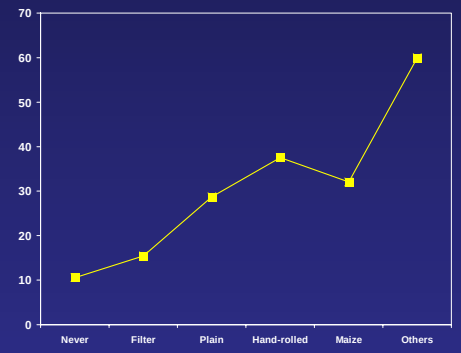
Current smoking status



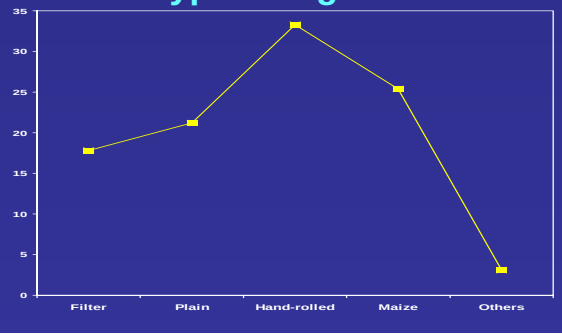
Type of cigarettes smoked



Prevalence of COPD according type of cigarette



Pack-years according to type of cigarette



Crude and adjusted odds ratios for COPD according type of cigarette

Type	Crude	Adjusted
Never	1.00	1.00
Filter	1.55	1.47
Plain	3.41	1.45
Hand-rolled	5.08	2.19

All p-values <0.05
Adjusted for sex, age, schooling and pack-years

Discussion

The type of cigarette is a main determinant of COPD prevalence. Hand made cigarette smokers were the group with the highest COPD risk. Part of this effect is due to a higher mean number of pack-years.