

## INTRODUCTION

COPD is a disease of high morbidity and mortality. Although the best source for understanding the predictors of mortality is derived from population based studies, few data is available in the literature.

The objective of the present study is to study some predictors of mortality (specially those related to COPD) in a five-year period in a population based sample in Montevideo.

## METHODS

885 adults aged 40 years or more were examined in 2003 as part of the PLATINO study phase I, in the city of Montevideo, Uruguay. COPD was defined as FEV1/FVC < 0.7 post bronchodilator and classified according to GOLD stages. The same sample was followed 5 years later (2008) – PLATINO study phase II. The overall response rate of the follow-up study was 85.2%. There were 71 deaths in the period (confirmed by the mortality system of Uruguay).

Regression analysis was carried out having age as the exposure and COPD as the outcome.

Predictors of mortality - besides age - were analysed by logistic regression (each variable was adjusted for all other variables).

## RESULTS

Mortality in this population based sample in the five-year period was 8% (95% CI 6.2; 9.8)

### LOGISTIC REGRESSION FOR MORTALITY ADJUSTED FOR CONFOUNDERS

	Odds Ratio	95% CI	P value
FEV1 (liters/s) (high)	0.23	0.10;0.52	<0.001
FVC (liters)	1.51	0.76;2.99	0.24
Smoking (current smokers)	1.48	1.03;2.12	0.03
Age (high)	1.05	1.02;1.07	0.002
Gender (females)	0.37	0.17;0.82	0.01
Schooling (high schooling)	0.74	0.56;0.99	0.04
Comorbidities	1.10	0.85;1.46	0.47

FEV1 – Forced expiratory volume in one second; FVC – Forced vital Capacity, 95% CI – 95% Confidence Interval

### LOGISTIC REGRESSION FOR MORTALITY ADJUSTED FOR CONFOUNDERS

	Odds Ratio	95% CI	P value
GOLD II-IV	5.06	2.6;9.7	<0.001
Smoking (current smokers)	1.59	1.11;2.25	0.01
Age (high)	1.07	1.04;1.09	<0.001
Gender (females)	0.79	0.46;1.36	0.40
Schooling (high schooling)	0.75	0.56;0.99	0.04
Comorbidities	1.07	0.82;1.39	0.59

## CONCLUSIONS

The crude mortality coefficient in the five-year period in the PLATINO study was 16/1000/year

The main predictors for mortality in this study (adjusted for possible confounders) were: male gender, older ages, low schooling, smokers, low FEV1, COPD GOLD II-IV

The highest OR for mortality was among those classified as COPD GOLD II-IV (even after adjustment)