

MODELING SPANISH ANXIOLYTIC CONSUMPTION: ECONOMIC,
DEMOGRAPHIC AND BEHAVIORAL INFLUENCES.

E. De la Poza , N. Guadalajara

elpopla@esp.upv.es; nguada@omp.upv.es

Departamento de Economía y Ciencias Sociales, Universitat Politècnica de València
and

L.Jódar , P. Merello

ljodar@imm.upv.es; pameregi@hotmail.com

Instituto de Matemática Multidisciplinar, Universitat Politècnica de València

The economic impact of the consumption of drugs has become an important issue in the Spanish Budget. In fact, it represented over 23% of the Spanish Health Budget in 2007. In particular, the prescription of anxiolytics (drugs with potential addictive behavior) was 16% of the total pharmaceutical expenditure in Spain in 2007.

The reasons that explain the consumption of anxiolytics could be: the current economic situation, since high rates of unemployment along with higher rates of life expectancy could drive the development of addictive behaviors (due to physical and behavioral performance). As consequence an immoderate increase in the volume of prescriptions and a high level of public health expenditure are produced. The implementation of policies addressed to reduce its inappropriate prescription and uncontrolled cost should be considered.

This paper deals with the mathematical modeling of the growth rate of anxiolytic consumption. Data was collected for the case study in the Spanish region of Castellón.