

FREE COMUNICATION

HERB- DRUG INTERACTIONS AMONG COMMONLY USED PSYCHOACTIVE SUBSTANCES BY HEALTHCARE STUDENTS

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INTRODUCTION (1/2):

1. The concurrent use of herbs and/or nutritional supplements with psychoactive effect and prescription medications is common among college students.
2. College students are a particularly vulnerable population, for they are under less social/familiar surveillance and seek greater independence, as well as under greater intellectual effort, stress, anxiety and depression, which predispose them to a higher consumption of psychoactive substances

INTRODUCTION (2/2):

3. Herbs, vitamins, and other dietary supplements may influence the effects of prescription and nonprescription drugs leading to adverse consequences, by **INCREASING THE POTENTIAL FOR INTERACTIONS.**
4. However, documented interactions between herbal medicinal products and prescribed drugs are rare.

OBJECTIVE:

determine the prevalence of CONCOMITANT USE OF PSYCHOACTIVE SUBSTANCES among healthcare students in the Lisbon School of Health Technology, Portugal, in order to ASSESS THE RISK OF POTENTIAL HERB-DRUG INTERACTIONS.

METHODS (1/2):

A convenience sample of 180 students, stratified by academic year and degree course, were requested to fill a modified SEMI-STRUCTURED SELF-REPORTED QUESTIONNAIRE based on previous national surveys.

66 items covering:

- demographic characteristics;
- health and well-being;
- **PREVALENCE AND FREQUENCY** of use of several types of substances
 - (including alcohol and tobacco, prescribed drugs and OTCs).

METHODS (2/2):

PRIMARY OUTCOME: Prevalence of prescription and OTC medications, herbal products and dietary supplements consumption.

POTENTIAL INTERACTIONS WERE IDENTIFIED FROM A LITERATURE SEARCH OF DOCUMENTED INTERACTIONS.

Chi-square test and Spearman correlation coefficient were used to evaluate the association between variables.

RESULTS (1/4):

1. Participants age distribution varied between 18-25 years old
2. Xanthines and alcohol consumption were mentioned by 97% of students, herbs/dietary supplements with stimulant effect by 61%
 - Except for xanthines, the use of these substances seemed to be isolated.
3. The consumption of anxiolytic drugs and calming supplements, at least once in the previous 12 months, was identified in 56% of students

RESULTS (2/4):



RESULTS (3/4):

4. Concomitant use of sedatives and mild stimulants ($P=0.502$) indicate potential risk for antagonism.
5. Concomitant use of anxiolytic prescription drugs and herbal preparations/dietary supplements with relaxing properties ($P=0.568$) indicate potential risk for synergistic effects

	Variáveis de consumo						
	Nicotina	Álcool	Xantinas	Medicamentos ansiolíticos, sedativos e hipnóticos	Medicamentos antidepressores	Suplementos calmantes	Suplementos estimulantes
Nicotina	1,000	0,257 *	0,140	0,350	-0,444	0,332 *	0,201
Álcool	0,257 *	1,000	0,230 **	-0,022	-0,077	0,047	0,098
Xantinas	0,140	0,230**	1,000	0,176	-0,269	0,325 **	0,314 **
Medicamentos ansiolíticos, sedativos e hipnóticos	0,350	-0,022	0,176	1,000	0,454	0,568 **	0,502 **
Medicamentos antidepressores	-0,444	-0,077	-0,269	0,454	1,000	0,552	0,644
Suplementos calmantes	0,332 *	0,047	0,325 **	0,568 **	0,552	1,000	0,459 **
Suplementos estimulantes	0,201	0,098	0,314 **	0,502 **	0,644	0,459 **	1,000

CONCLUSIONS:

- I. Our findings suggest that a considerable percentage of participants is at risk for a potential herb-drug interaction.
- II. This future health professionals must recognize the consequences of these substances consumption and use reliable resources to assess the safety of these products with regard to modify the potential risk for interactions.
- III. Considering the increasing popularity of herbal medicines, we find important to assess potential herb-drug interactions in broader student populations.

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