



Title: Health Risk Behaviors and Emotional State of Medical Students

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INTRODUCTION

- Inadequate lifestyles have been associated with the development of mental disorders such as anxiety and depression, which represent some of the main causes of death around the world.
- Anxiety and depression are the psychological disorders with the greatest impact upon public health and which have also been associated with an unhealthy lifestyle.



Unhealthy behaviors

Healthy lifestyle

Disorders like anxiety and depression have begun to affect younger generations, encouraging the inclusion of healthy behaviors within the lifestyle

- ✓ Physical activity,
- ✓ Eating a healthy diet,
- ✓ Avoiding the use of substances (tobacco alcohol and drugs).

Ample evidence has shown the benefits of physical activity for potentially avoiding or reducing the symptoms of anxiety and depression



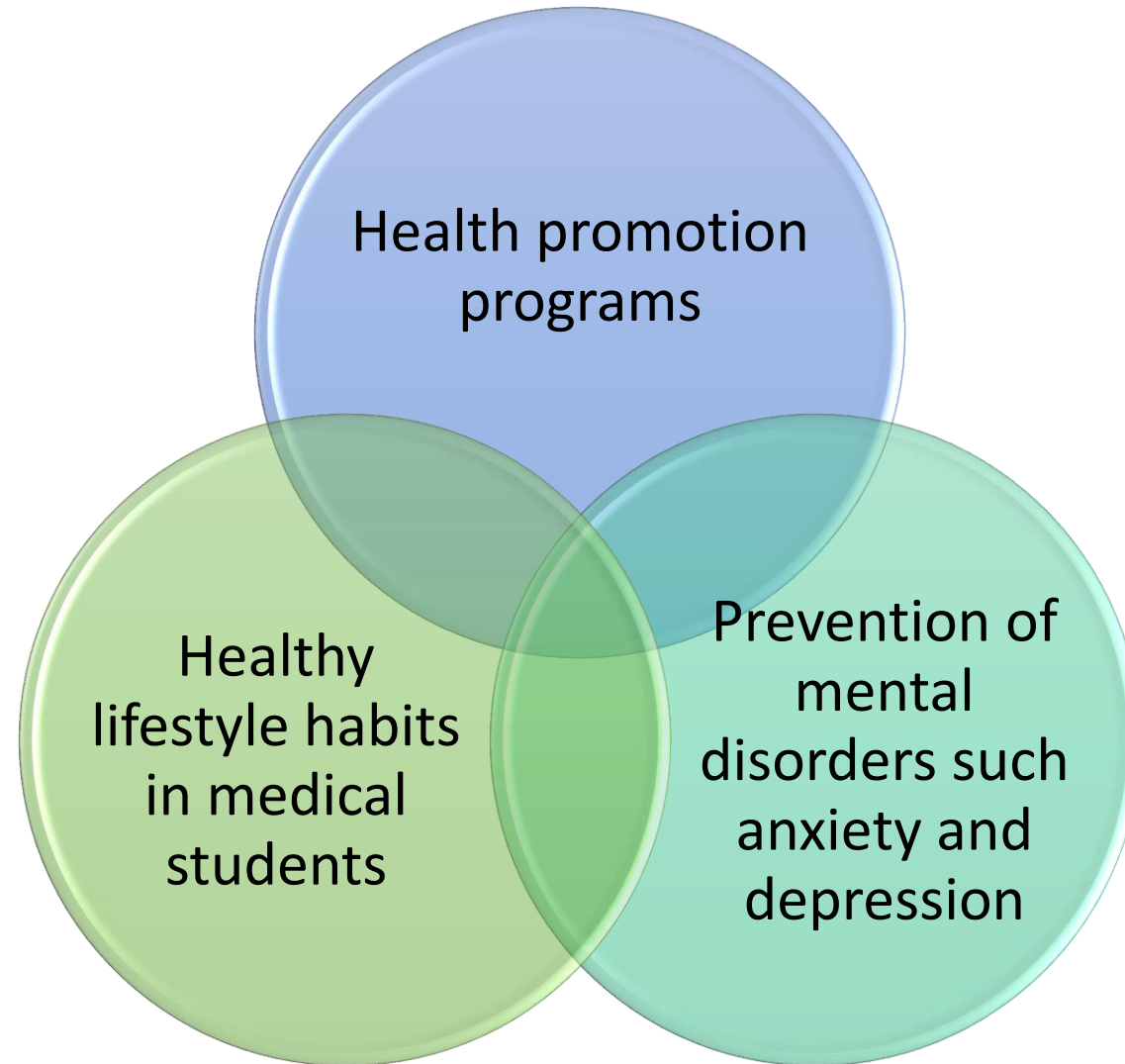
University students may be in a period in which incorporate risk behaviors to their life, the development of new social networks and greater autonomy can promote the use of alcohol, tobacco, drugs, risk sexual behavior, sedentary lifestyle and poor eating and sleep habits, among others.

Students who have unhealthy behaviors have twice as likely to have associated mental disorders.

- In addition, risk behaviors which are initiated at this stage can be perpetuated throughout adulthood.



Study of health risk behaviors.



METHODOLOGY

Analytical cross-sectional study
(January-March 2019)

173 public university students

Interview sociodemographic and clinical data

Beck Depression Inventory (BDI-II)

Beck Anxiety Inventory (BAI)

Fagerström Physical Nicotine Dependence Scale

Alcohol Use Disorders Identification Test (AUDIT)

Body Mass Index

Physical activity

Statistic Analysis

Qualitative variables
frequencies and percentages, as well as mean

Quantitative variables
standard deviation for

The chi square or Fisher exact statistical test differences due to the presence of anxiety, depression or gender.
Odds Ratio (OR)

RESULTS

Average age was 20.9 years (SD = 2,2).

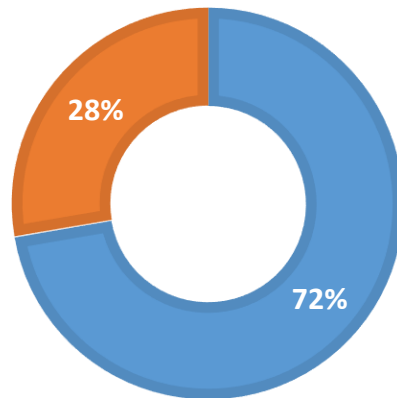
Single 65,9% (114)

Engaged 31,8% (55)

Married 2,3% (4)

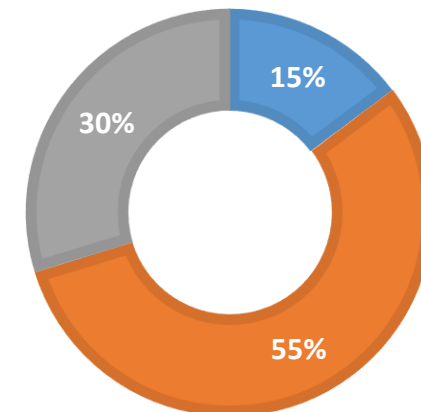
GENDER

■ Women ■ Man



YEAR OF MEDICAL TRAINING

■ 1º or 2º ■ 3º or 4º ■ 5º or 6º



- **Mental health:** 103 students (59,5%) presented anxiety and 48 (27%) showed depression.
- **Unhealthy lifestyle behaviors:** 97 students (56,1%) were sedentary, 1 (0,6%) had nicotine dependence, 34 (19,7%) reported risk alcohol consumption, 38 (22%) were overweight and 15 (8,7%) were obese.
- **Statistically significant differences:**
 - Between sedentary individuals and those who performed regular physical activity in relation to anxiety, with a **p = 0,01** and an **OR = 0,446 (CI = 0,24 – 0,83)**.
 - Between those with risk alcohol consumption habits and those who did not have any problems with alcohol consumption in relation to depression, with a **p = 0,005** and an **OR of 2,972 (CI = 1,36-6,49)**.

Variable	Anxiety			Depression		
	n (%)		P	n (%)		p
	Without	With		Without	With	
Sedentarism						
Present	31(44)	66 (64)	0,01**	67(54)	30 (62)	0,291
Absent	39 (56)	37 (36)		58(46)	18 (38)	
Smoking						
Present	70 (0)	102 (99)	0,595	125 (100)	47 (99)	0,277
Absent	0 (0)	1(1)		0 (0)	1 (1)	
Excessive Alcohol Consumption						
Present	10 (14)	24 (23)	0,143	18 (14)	16 (33)	0,005**
Absent	60 (86)	79 (77)		107 (86)	32 (67)	
BMI						
Low Weight	4 (6)	3 (3)	0,586	5 (4)	2 (4)	0,276
Normal Weight	46 (65)	67 (65)		86 (69)	27 (56)	
Overweight or Obesity	20 (29)	33 (32)		34 (27)	19 (40)	

Notes: n (%)= Frequency (percentage); p= probability; BMI= Body Mass Index, **p<0.05

When analyzing emotional state in relation to the sociodemographic variables, particularly gender, ($p = 0,002$) anxiety and depression were found to be more prevalent among women than men with (62% vs. 46%) and (34% vs. 10%), respectively (Table 2).

	Feminine	Masculine	p	OR (CI)
	n (%)	n (%)		
Anxiety				
Present	77 (62)	22 (46)	0,372	
Absent	48 (38)	26 (54)		
Depression				
Present	43 (34)	5 (10)	0,002**	0,22 (0,82-60)
Absent	82 (66)	43 (90)		

Notes: n(%)= Frequency (percent); p= probability; OR= Odds Ratio; CI= Confidence Interval.

Table 2 Anxiety, depression and gender. Source: own elaboration.

Gender:

Significant differences in eating habits, men had a higher prevalence of obesity than women (52% vs 22%) (Table 3).

Variable	Feminine	Masculine	p
	n (%)	n (%)	
Sedentarism			
Present	71 (57)	26 (54)	0,755
Absent	54 (43)	22 (46)	
Smoking			
Present	0 (0)	1 (2)	0,277
Absent	125 (0)	47 (98)	
Excessive Alcohol Consumption			
Present	21 (17)	13 (27)	0,128
Absent	104 (83)	35 (73)	
BMI			
Low Weight	7 (6)	0 (0)	<0,001** *
Normal Weight	90 (72)	23 (48)	
Overweight or Obesity	28 (22)	25 (52)	

CONCLUSIONS

Medical students carry a large academic load which could potentially contribute to present a variety of risk factors against health.

At the top of the list of risk factors are anxiety followed by depression, both of them are linked to sedentary lifestyle and overweight problems.

Gender plays an important role over the emotional state, since women's present highest prevalence of anxiety and depression.

Anxiety is the most common mental health problems in students, followed by depression.

Medical schools are known to be a stressful environment that leads to negative effect on the students physical and psychological health.

It's Long term follow-up of such study cohorts will be useful to educators, administrators and practitioner to inform efforts to optimize the health, safety, and efficiency of our future medical practitioners

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