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Research Article

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Obsessive-compulsive disorder in medical students: Prevalence, Symptom severity, and Correlates.

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Abstract

Introduction: This research is to determine severity of obsessive compulsive disorder (OCD) among medical students. Obsessive-compulsive disorder is characterised by an obsessive need to repeatedly do certain things, such as hand washing, checking or cleaning house [(1)]. health students in general and medical students specifically are prone to Obsessive compulsive disorder (OCD) since they are taught that any mistake in terms of sterilization and cleanliness could result into infection of various microbes for either themselves or the patient.
Methodology: the study type was a cross section, the questionnaire was distributed on 76 students from all years[(1st table in the results)] and was designed to assess the severity of OCD using Yale-Brown scale[(2)] in an Arabic format, questionnaire was distributed throughout a whole week to reach maximum number of subjects.
Results: After evaluating data we collected, the results showed a huge percentage of students with mild symptoms and percentages of students with severe symptoms was equal to those without any [(2nd table in the results)]
Conclusion: the results clearly tell us that there is problem that needs to increase awareness and treated and the first step of treatment of any disease is to increase the patient's awareness about it, at last, because these students are going to be health professionals they must be healthy themselves both mentally and physically.

Keywords: OCD, questionnaire, Yale-Brown scale.

Introduction

Since medical students are repeatedly taught to be responsible and sterile and taught that any mistake could lead to terrible consequences, a psychological effect could happen and lead to development of OCD , a health worker should be healthy himself before he gets to treat patients ,health is not only the physical/organic well being , health is also mental , The World Health Organization (WHO) defined health in its broader sense in its 1948 constitution as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.[(3)] and also according to (WHO) mental health includes : subjective well-being, perceived self-efficacy, autonomy, and competence[(4)]. And mental disorders are : a broad range of problems, with different symptoms. However, they are generally characterized by some combination of abnormal thoughts, emotions, behaviour and relationships with others. Examples are schizophrenia, depression, obsessive compulsive disorder (OCD) [(5)].

What is it OCD**?** Obsessive–Compulsive Disorder (OCD) is a serious anxiety-related mental health problem where a person experiences frequent intrusive, repetitive and unwelcome obsessional thoughts (the obsessive part of OCD) which leads to an increase in anxiety and often followed by repetitive physical or mental behaviours, impulses or urges (the compulsive part of OCD) conducted in a vain attempt to relieve themselves of the perceived fear and obsessive thoughts [(6)]**.**

What causes OCD? Causes range from psychological like anxiety or biological like a change in brain chemistry or even genetic [(7)].

Objective:

This study is to determine the psychological impact of studying medicine and the possibility to develop OCD symptoms among medical students.

Methodology

Study design: Medical students based cross sectional study

Study setting: Dawadmi city, King Abdul-Aziz main road, Dawadimi branch of Shaqra University, College of Medicine.

Study duration: 17th to 24th of December 2017

Study subjects: All students of the study area

Inclusion criteria : Medicine preparatory year students who are willing to continue in studying medicine , students who are not aware of OCD but willing to participate after educating themselves about it.

Exclusion criteria: preparatory year students who aren't willing to continue in studying medicine, students who were not at the study area at the time of study duration.

Sample size: since the total amount of dawadimi branch of Shaqra University College of medicine is approximately 100 and the number of absent students during study duration could reach 25%, sample size should be from 75 to 100.

Study tool: predesigned and pretested questionnaire with the following sections used:

- Year of medical college
- Questionnaire based on Yale-brown scale [(2)] which is a self-rating scale that is designed to assess the severity and type of symptoms in patients with OCD. The scale is made of 10 questions each question based on the average occurrence of each item over the past week**.**
- The first 5 questions relate to obsessive thoughts and has 20 marks of the total 40,
- The last 5 questions relate to compulsive behaviours and have 20 marks of the total 40.

Data collection method: data will be collected by the 7 students who participated in this research using the above said questionnaire by one to one interview by class to class survey. Every day during the study duration researchers will be distributing the questionnaire until sample size is reached.

Data entry & analysis : Data will be entered in MS Excel & medCalc then analyzed , all qualitative variables will be analyzed for proportions and all quantitative variables will be analyzed for and standard deviation , P value , T value , and percentage of severity of OCD among each year. To look for association between studying medicine and developing OCD symptoms. questionnaire is made of 10 questions Each question based on the average occurrence of each item over the past week**.** The first 5 questions relate to obsessive thoughts and has 20 marks of the total 40, the last 5 questions relate to compulsive behaviours and has 20 marks of the total 40.

Scores from 1-15 *indicate mild OCD symptoms, 16-23 indicate moderate symptoms, 24-31 indicate severe symptoms, 32-40 indicates extreme symptoms.*

Of each question : ANSWER 1 HAS 0 MARKS , ANSWER 2 HAS 1 MARK , ANSWER 3 HAS 2 MARKS , ANSWER 4 HAS 3 MARKS , ANSWER 5 HAS 4 MARKS.

Results

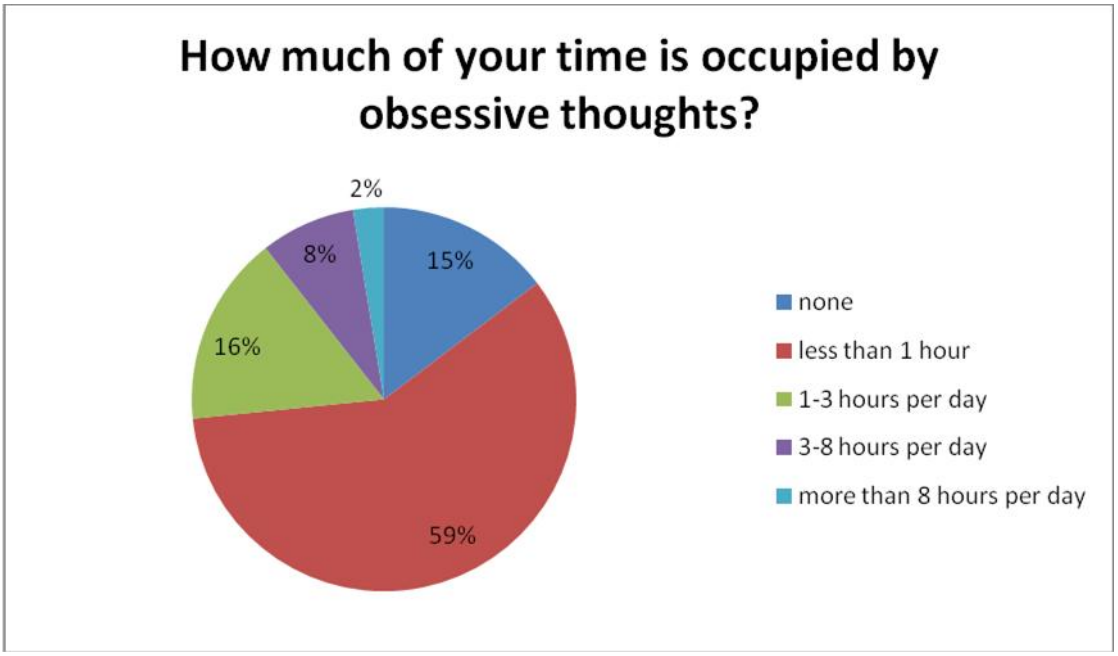
Table-1

Year	Number of participants
Preparatory year	5
First year	19
Second year	16
Third year	25
Forth year	11

The first table shows that the most number of participants was from the third year and the least was from preparatory year.

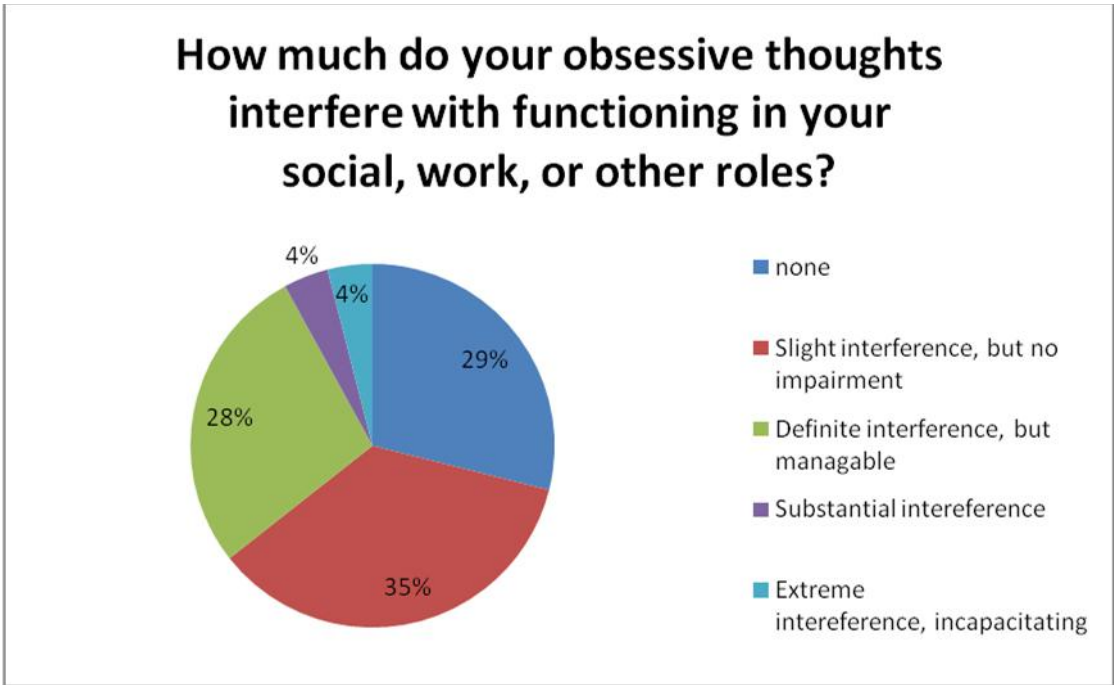
Questionnaire questions figures:

Question 1:



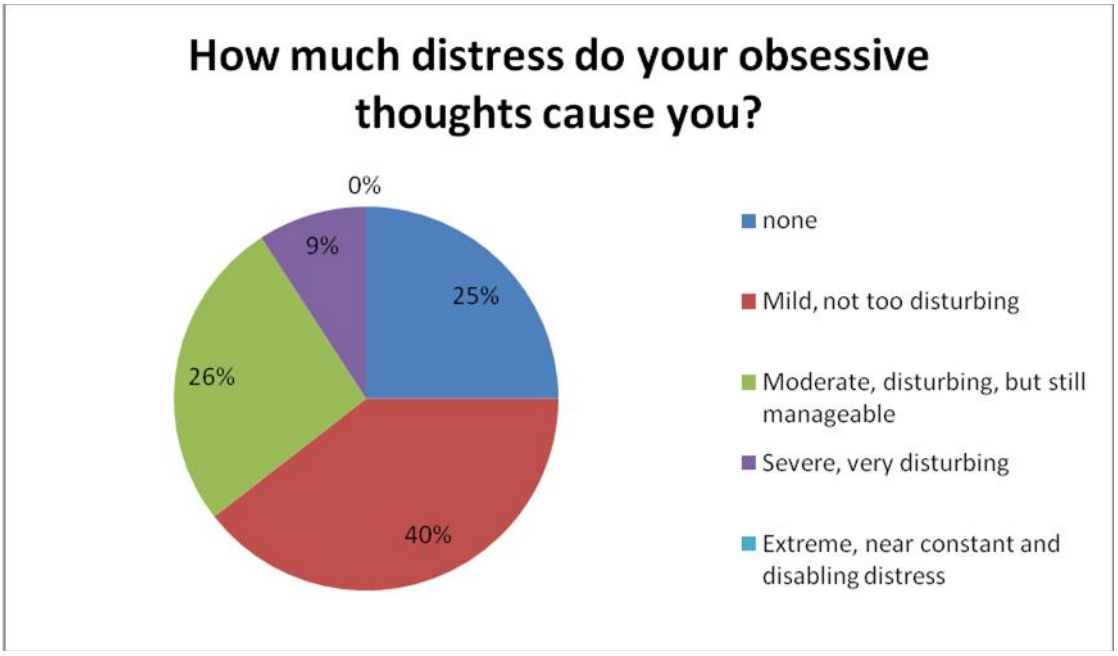
1st figure shows that 59% spend less than an hour per day about obsessive thoughts while only 15% aren't having any.

Question 2 :



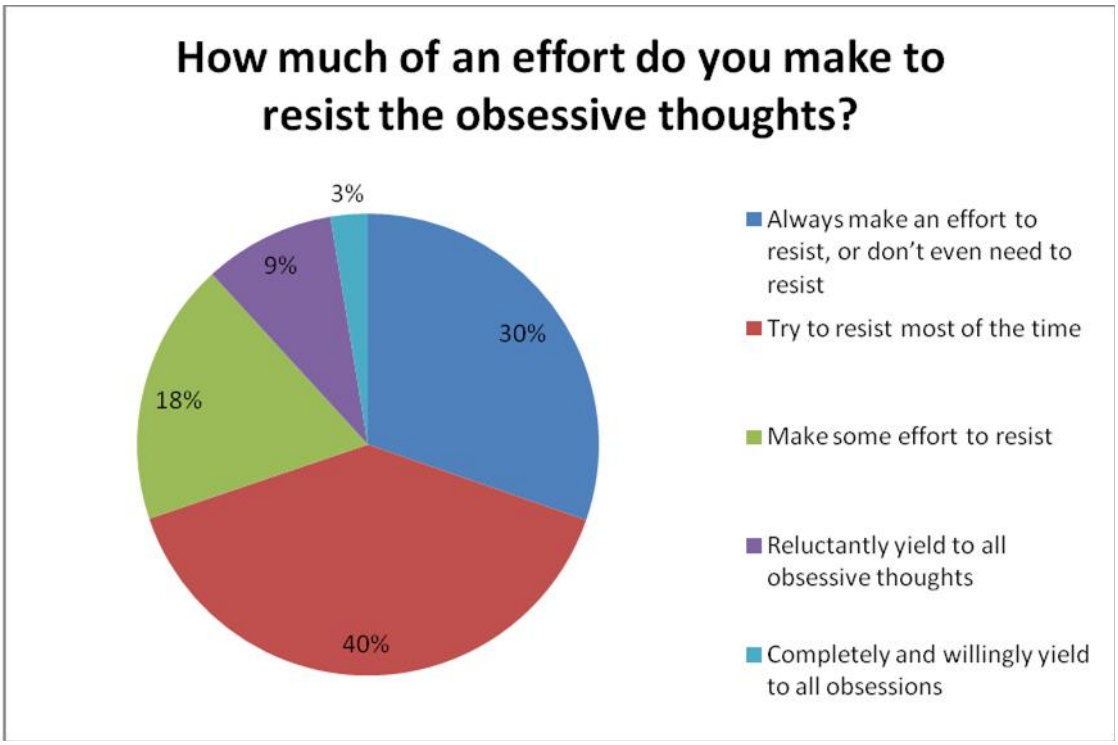
2nd figure shows that the percentage of students without obsessive thought interference of their work is the same as those with slight or mild interference.

Question 3 :



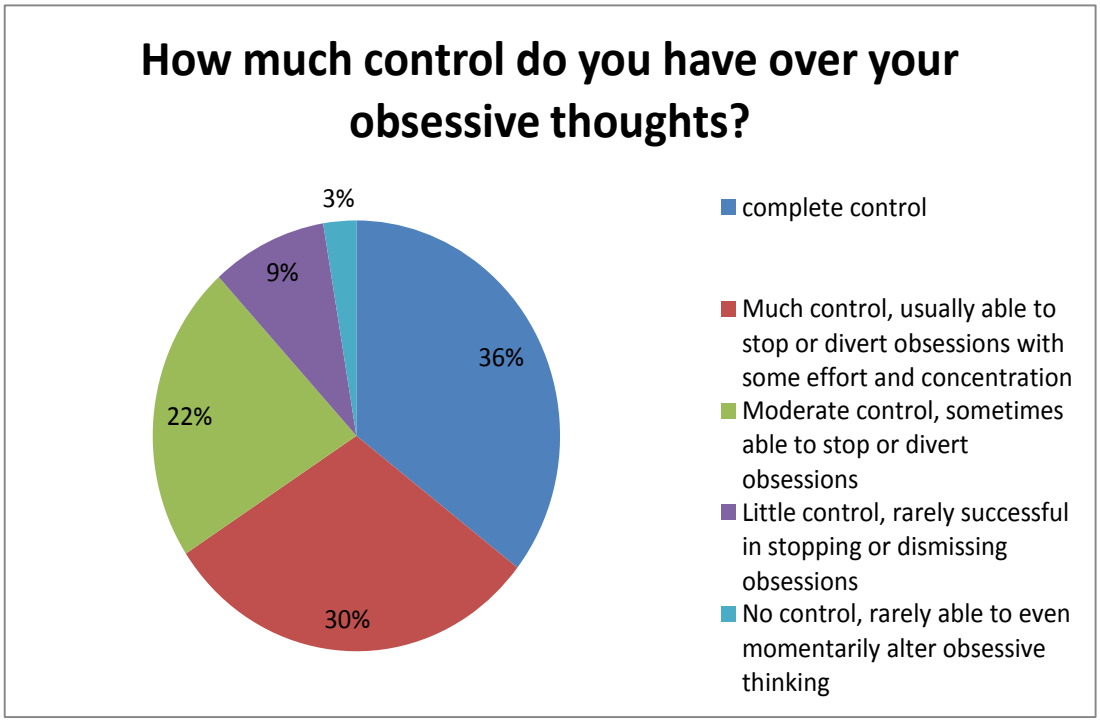
3rd figure shows that same amount of students not distressed obsession thoughts as amount of severely distressed while the majority are mildly distressed

Question 4 :



4th figure shows 30% don't even need to resist the obsessive thoughts while 40% need to and 18% do more effort to resist

Question 5:



5th figure shows that only 3% have complete control on obsessive thoughts while the amount those with much, moderate, and little is the same

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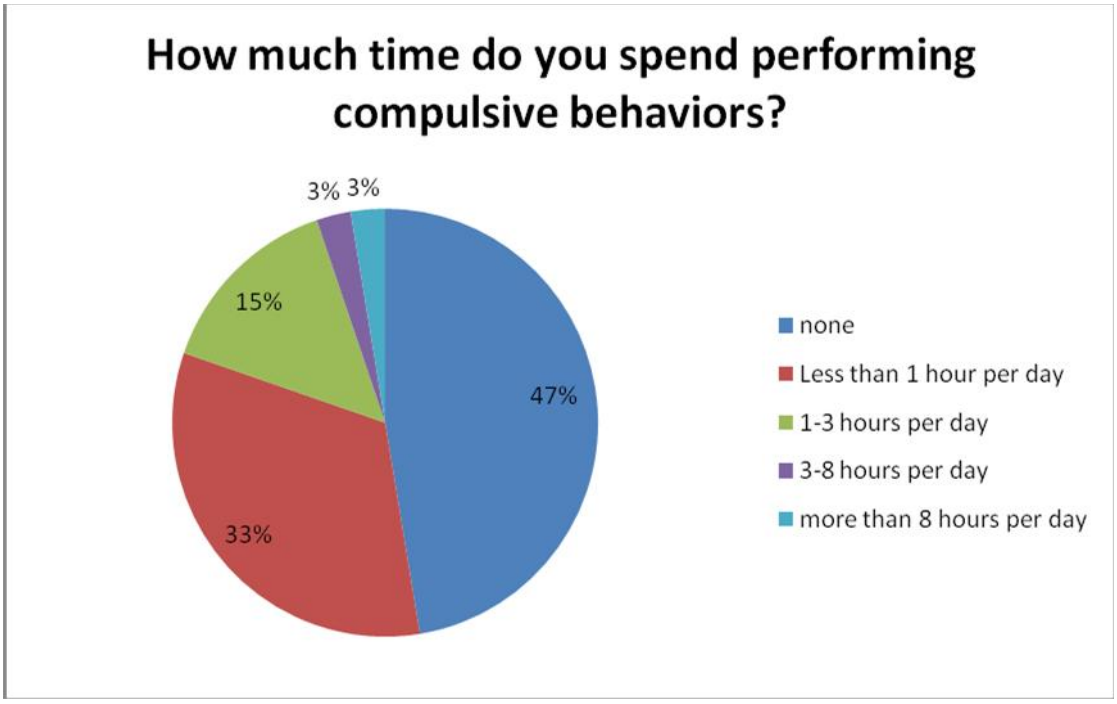
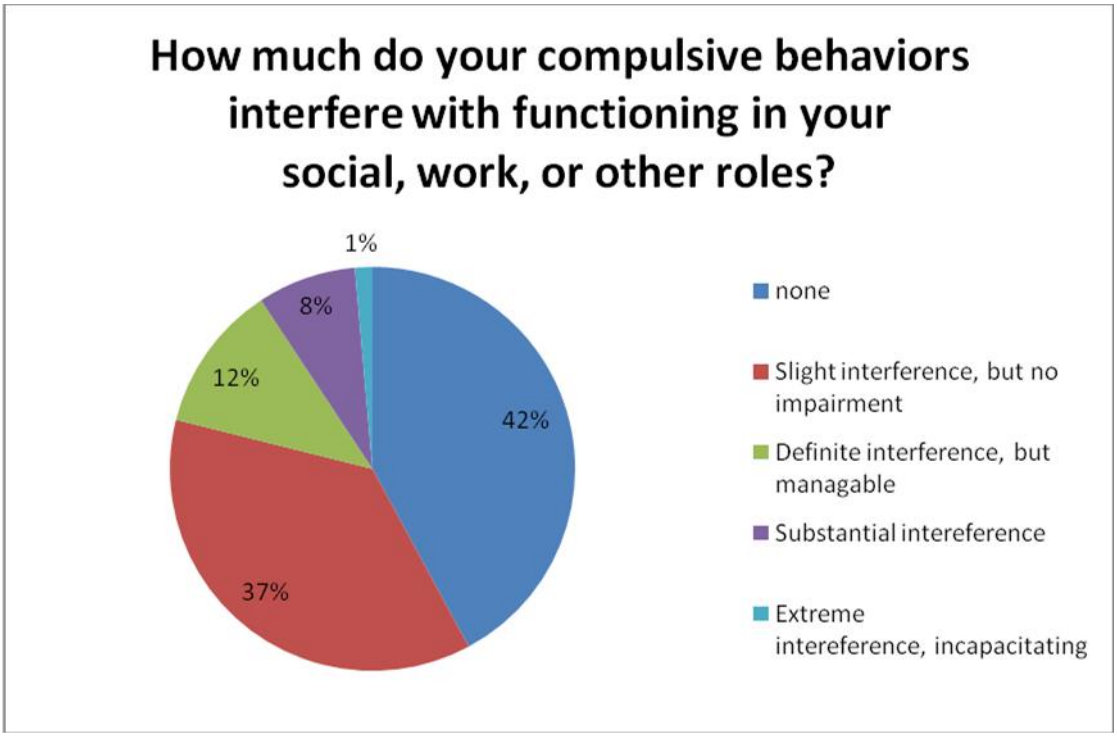
Question 6 :



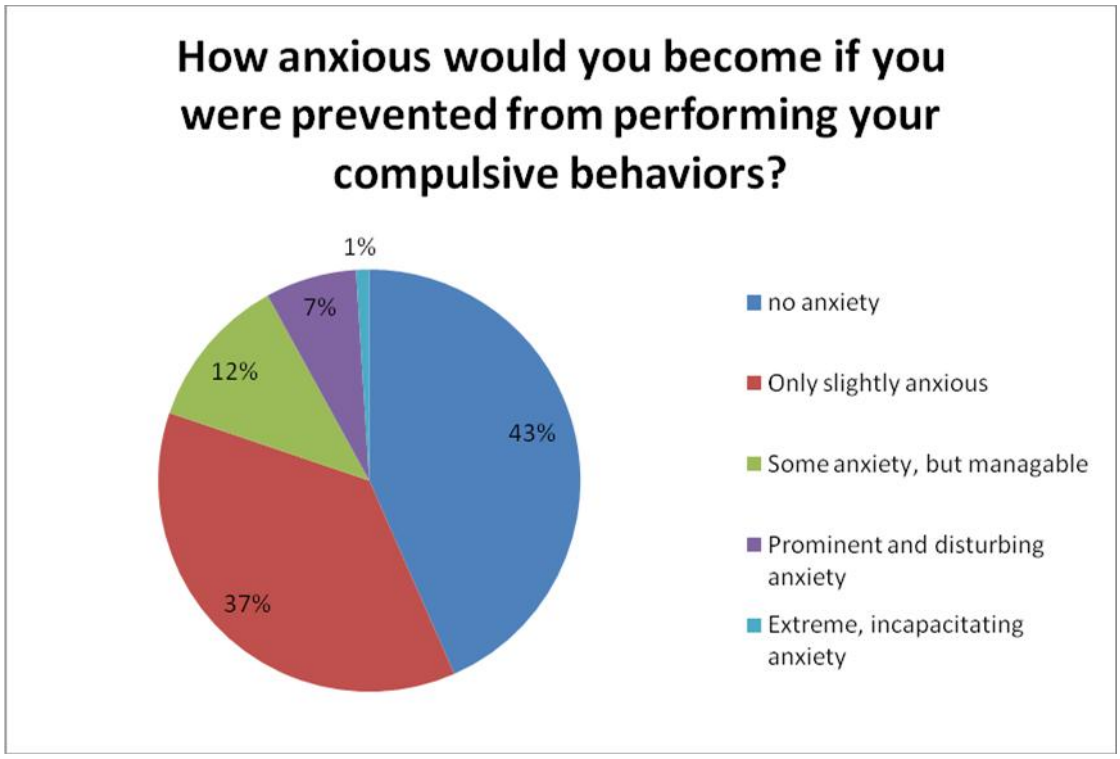
6th figure shows that most of the students spend no time in compulsive behaviours while 30% spend less than an hour

Question 7 :



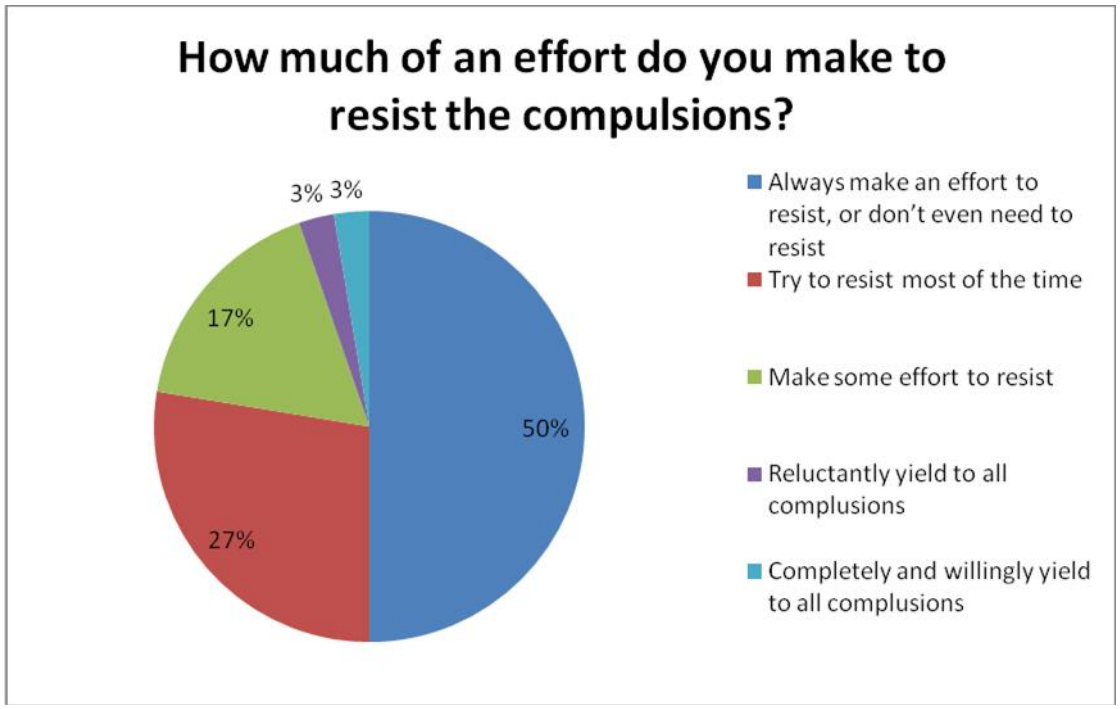
7th figure shows that percentage of students with no or mild compulsive interference in their work is almost the same

Question 8:



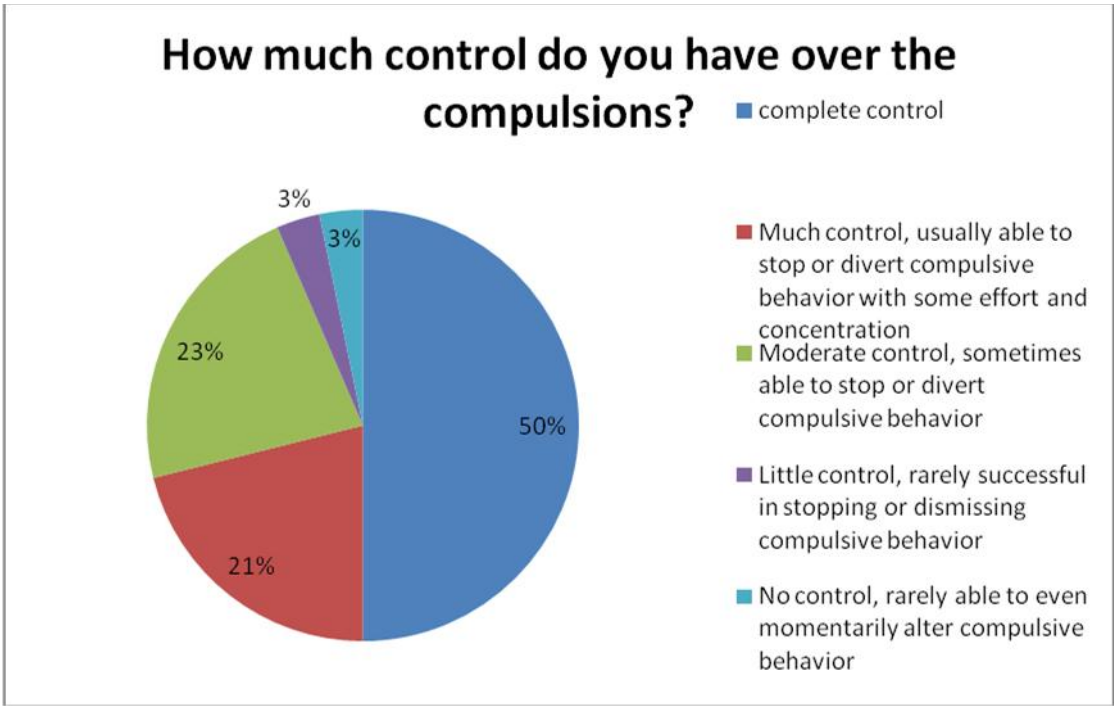
8th figure shows that 37% are slightly anxious if they don't do compulsive behaviours while 12% have more anxiety and 7% have prominent anxiety

Question 9:



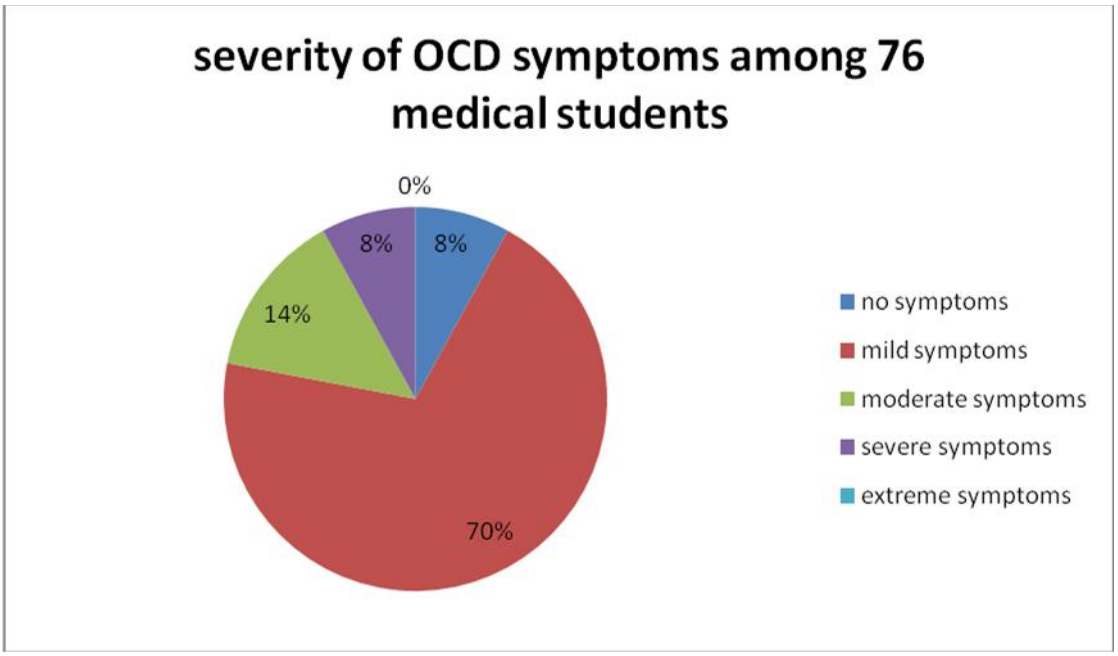
9th figure shows that half of the students don't even need to resist while quarter of them makes slight effort and the other quarter makes more effort

Question 10 :



10th figure shows that half of the students have complete control of their compulsive behaviours while the rest two quarters have moderate to little control

Question 11 :



Eleventh figure sums up evaluation of all of the 10 questionnaire questions among the 76 participants , results shows that 8% of all subjects have not developed any OCD symptoms, 70% developed mild symptoms, 14% developed moderate symptoms, 8% developed severe symptoms, and 0% developed extreme symptoms

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Table- 2

YEAR	No symptoms	Mild symptoms	Moderate symptoms	Severe symptoms	Extreme symptoms
Preparatory	3	1	1	0	0
First	2	13	3	1	0
Second	1	12	2	1	0
Third	2	18	3	2	0
Forth	2	5	2	2	0

The second table tells us that the year group with the most percentage of students without symptoms are preparatory year students, while the ones with most percentage of mild and moderate are third year students, and the most percentage of severe symptoms are forth year students, lastly, all year groups have no students with extreme symptoms

Table – 3

YEAR	No symptoms	control
Preparatory	3	5
First	2	19
Second	1	16
Third	2	25
Forth	2	11
p value	P = 0.0211	

The table shows that most students with no symptoms were found in preparatory year with a significant p value.

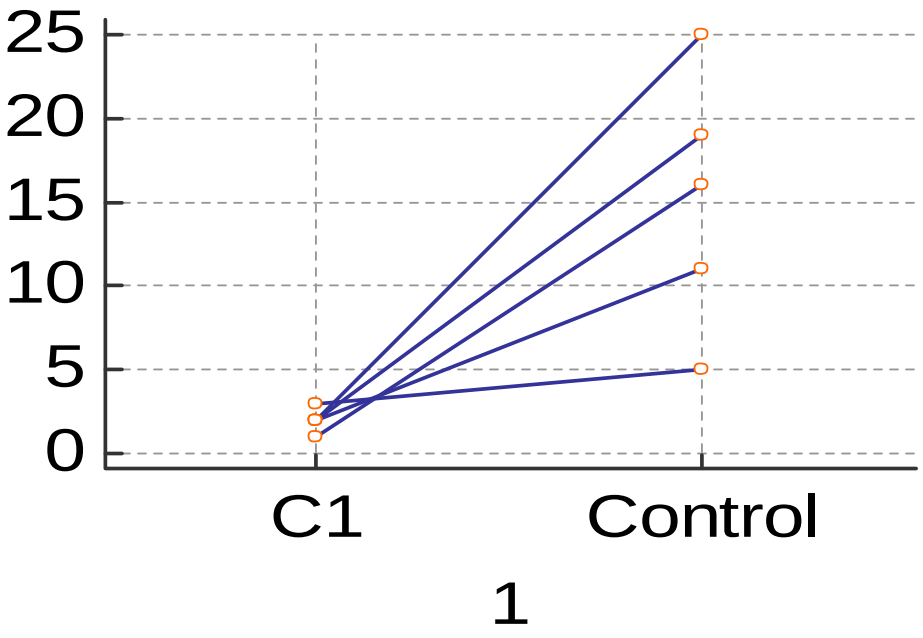

Table – 4

YEAR	Mild symptoms	control
Preparatory	1	5
First	13	19
Second	12	16
Third	18	25
Forth	5	11
p value	P = 0.0008	

The table shows that most students with mild symptoms were found in 3rd year with a significant p value.

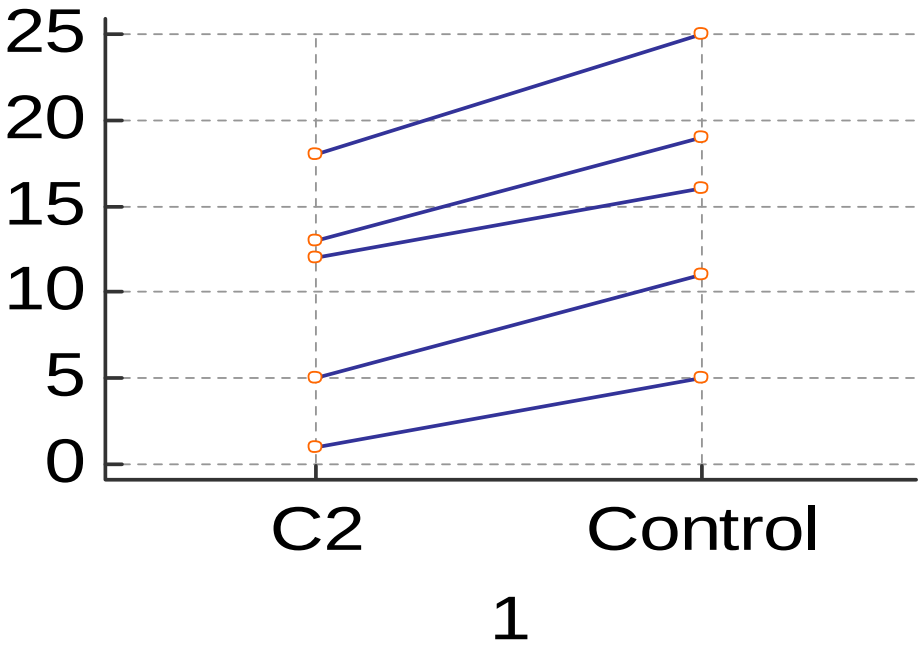

Table – 5

YEAR	Moderate symptoms	control
Preparatory	1	5
First	3	19
Second	2	16
Third	3	25
Forth	2	11
p value	P = 0.0133	

The table shows that most students with moderate symptoms were found in 1st and 3rd year with a significant p value.

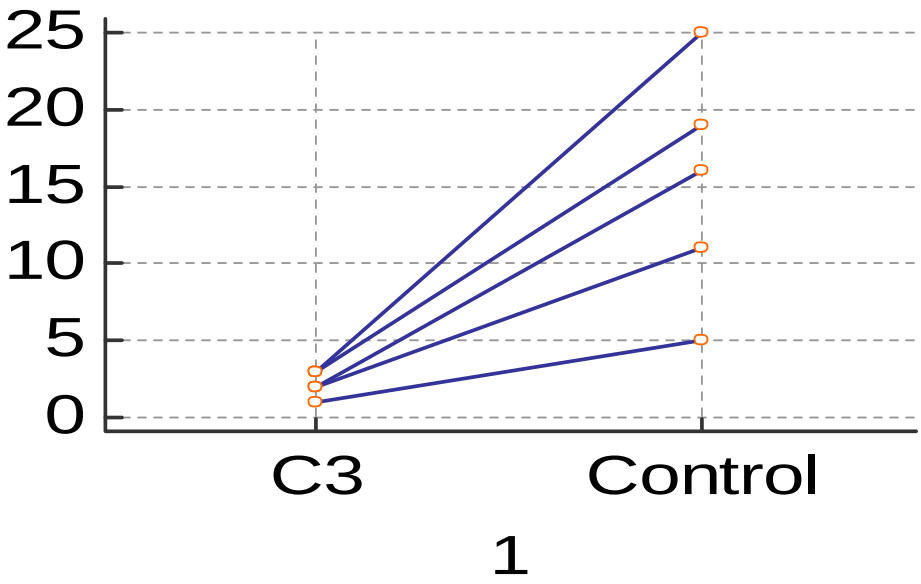

Table -6

YEAR	Severe symptoms	control
Preparatory	0	5
First	1	19
Second	1	16
Third	2	25
Forth	2	11
p value	P = 0.0118	

The table shows that most students with severe symptoms were found in 4th and 3rd year with a significant p value.

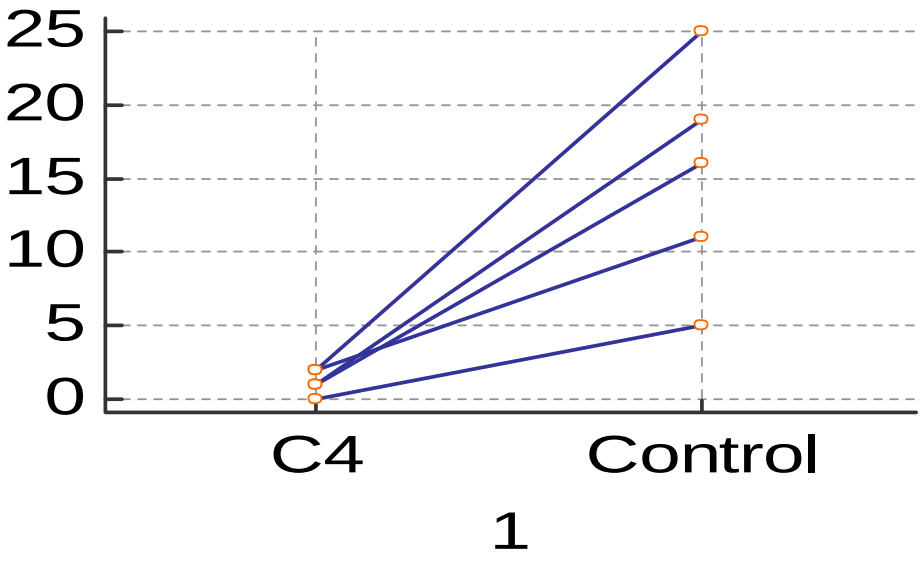

Table – 7

YEAR	Extreme symptoms	control
Preparatory	0	5
First	0	19
Second	0	16
Third	0	25
Forth	0	11

The table shows that there were not any students with extreme symptoms, with an insignificant p value.

Discussion

Studies have shown that the stress generated by being a medical student has lead to development of OCD especially if the student was a freshman [(14)]. Other studies shown that OCD alongside depression, dementia, alcohol abuse and schizophrenia was among the most recognized mental disorders in medical students [(15)]. A study that compared the differences in obsessive symptoms between medical students, law students and a control population has found that Medical students were more likely than law students to possess the obsessive symptoms of cleanliness and conscientiousness [(16)]. Another study showed that OCD was among The top three mental problems of medical students and that the Factors that influence the mental health of medical students include academic pressure, professional satisfaction level and family environment [(17)]. The findings in our study indicate that the factors like pressure, study environment and being a freshmen have a clear impact on mental health and could lead to the development of mental disorders like OCD in our case.

Conclusion

The results clearly show the impact of being a medical student and the need to increase awareness of obsessive compulsive disorder (OCD) among health workers generally and medical students specifically.

Limitations of this research are that it does not tell the prevalence of OCD among other sorts of health students like nursing and pharmacy students, And the limitations of the results is that age group was replaced by year group.

Recommendations

We recommend to research about our same subject but after increasing awareness among the participants as we did not take fully aware participants then compare the results with ours to determine if it is a problem of awareness or genetics or any other cause of OCD.

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