



EFFECT OF COVID PANDEMIC ON PREVALENCE OF DEPRESSION AMONG MEDICAL STUDENTS OF SIALKOT MEDICAL COLLEGE SIALKOT, PAKISTAN.

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ABSTRACT

OBJECTIVE

The objective the study is to assess the percentage prevalence of depression among students of SMC, and the relationship of its severity with the Year of Study (MBBS) after pandemic.

MATERIAL AND METHODS

Beck's Depression Inventory (BDI) - II, In Urdu Translation was filled by the students from each year of study. Variables like year of study and age were mentioned, and the depression in subjects was graded as minimal, mild, moderate and severe based on BDI score. The study was conducted at Sialkot Medical College, Sialkot during pandemic of 04 months from 1st August to 30th November, 2021.

RESULTS

Out of 100 participants, 46% were suffering from Depression. On scoring and grading, 10% revealed minimal disease, 11% cases showed mild depression, in 15% moderate depression was seen while 10% cases were found to be of severe depression. The prevalence of depression decreased with increasing age and advancing year of study. Analysis showed: 60% of the depressed cases were from 1st year MBBS, 45% from 2nd year, 55% from 3rd year, 40% from 4th year, and 30% (least prevalence) in Final Year MBBS.

CONCLUSION

46 % MBBS students, in SMC are suffering from depression in September 2021. This shows that there are an enormous number of stressors faced by medical students. Approaching near professional exams is a great causative factor. While Mental Health effects of Covid 19 on medical students in the post covid period is worth mentioning.

KEY WORDS Depression, Beck's depression inventory, Medical students, covid-19.



INTRODUCTION

Depression is a common mental disorder, characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness and poor concentration.¹

It is an established fact that medical students across the globe suffer from Mental Health Issues; whereas, Depression is a significant health problem in one third university students.² Prevalence of Depressive and Anxiety disorders in students results in poor performance in academics, social withdrawal, and an increased tendency towards substance abuse, thereby leading to a vicious cycle of deteriorating mental and physical health². The stigma associated with Mental Health Issues has made it difficult to nip the evil in the bud, and thus the number of silent sufferers is rising day by day. ²The Deadly Covid19 Pandemic has also caused a great challenge on mental health of medical students. This adds to the various stressors, including peer pressure, exam stress, lack of facilities, and burn out. All These perils are amplified in a developing country like Pakistan, and especially in students studying on Self-finance in a Private Sector Medical College.²

Hence, this study was conducted, to find out the prevalence of depressed medical students, in a private sector medical college of Pakistan, in the post Covid-19 period, with approaching Professional exams (in November 2021). Online published articles are available on prevalence of depression in Pakistan on higher secondary or medical school students.^{16, 18, 19}

OBJECTIVE

The objective of our study is to find out the prevalence of depression among medical students in Sialkot especially of Sialkot Medical College after pandemic

and to find the relationship between the prevalence of depression and the years of study (MBBS).

METHODOLOGY

A Cross-Sectional Study was done among students of Sialkot Medical College, in August - November 2021, with a sample size of 100 MBBS Students.

Beck's Depression Inventory -II (BDI-2) was distributed among 20 students from each Year according to systemic random selection. However, the students who refused to be a part of the study were excluded and replaced by volunteer participants. Information like age, gender, year of study, emotional abuse, family composition and possession of cell phones were the variables taken into account.

The response forms were then scored and graded according to BDI-II Scoring. The criteria for grading were: Score 1-10; Normal, 11-13; Minimal, 14-16: Mild mood disturbance, 17-20; Borderline clinical depression, 21-30: Moderate Depression, 31-40: Severe Depression, 41-63; extreme depression.

RESULTS

Out of 100 students, 100 Students came up with Filled BDI Forms, (Response Rate = 100%) The BDI Forms revealed, that out of 100 subjects, 46 suffered from depressive illness, among which 10% minimal, 11% showed mild depression, 15% cases showed moderate depression, and 10% revealed severe depression but not a single case fell into extreme depression. However, 54% Students, showed no signs and symptoms of depressive illness according to our study.

The highest percentage prevalence of depression was among the students of 1st Year MBBS 60%. With somewhat decreasing fashion as the year of study advances, such that 45% prevalence in 2nd year students, 55% in 3rd year, 40% in 4th



year, and the least prevalence of depression, 30% in Final Year MBBS.

The Mean Ages of Students were 18-25 years. It was noteworthy that the majority of depressed subjects fell into the category of Mild Depression (11%). So the prevalence of Moderate Depression (15%, n=15) was one and a half fold more than the severe depression (10%, n=10), and as severity of disease shows suicidal ideation. However this tendency was comparatively low among these subjects. A higher rate of ailment was seen in students of nuclear family system (55%) as compared to joint family system (45%). Sadness (65%) was found to be remarkable symptom of ailment followed by weeping (39%) and lack of concentration in study (31%).

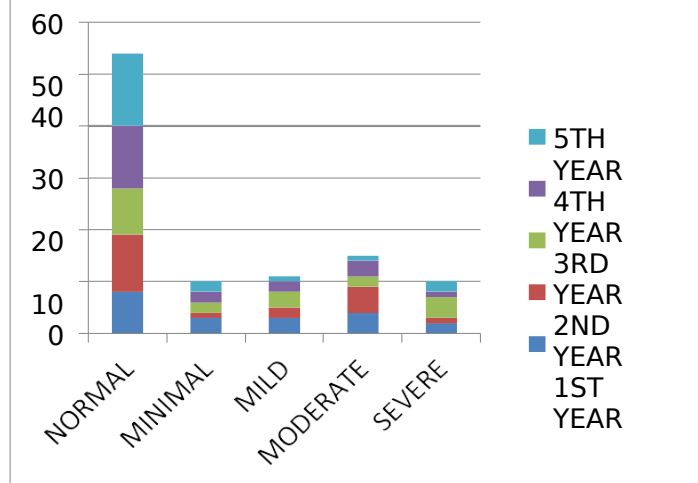


Figure 1 Severity of Depression

TITLE: NO. OF CASES PER CLASS						
Year	NORMAL	MINIMAL	MILD	MODERATE	SEVERE	Total
1 ST	8	3	3	4	2	12
2 ND	11	1	2	5	1	9
3 RD	9	2	3	2	4	11
4 TH	12	2	2	3	1	8
5 TH	14	2	1	1	2	6
TOTAL	54	10	11	15	10	46

DISCUSSION

Our results (46%) prevalence of depression coincides with the study performed in Iran 44%⁴, an international study (30.6%)⁷, Nepal (31%)²⁰, US (30.6%)¹³ and Brazil (32.8%)¹⁴. Bulgaria (47.1%)¹⁵.

However, our study disagreed with the following e.g. Uganda (21.5%)⁸, Vietnam (15.2%)⁹, Ethiopia (21.06%)¹⁰, and international study (27.2%)¹¹, because of different educational standards and policies for students in these countries.

The prevalence of depression among higher secondary school going children estimated by Dr. Sahibzada et al was (19.2%)¹⁹. This shows that stepping into practical life and the transition from schools to University is the main causative factor where the stress and depression levels of students increase drastically.

In an Indian study¹² more prevalence is shown i.e. (58%) than our study, may be because of more population explosion in India, and likewise more competition in the field of medicine, posing greater stress for students.

Our study also differs from Brazilian Study where prevalence is (28.8%)^{21, 14}, and also global index which is (27.2%)⁷, while a UK study shows (8.15%)¹⁵. All these studies were conducted before the pandemic of covid-19 wrapped its fangs around the world. Our research has more prevalence of depression than these studies because of the more

Variable	Percentage
Age	
18-20	27%
21-22	39%
23-25	44%
Family	
Nuclear	55%
Joint	45%
Phone Possession	
Yes	100%
No	0%
Emotional Abuse	
Yes	82%
No	18%
Location	
Urban	35%
Rural	65%



mental health challenges faced by students during and after the pandemic.

According to the recent research conducted by WHO, the prevalence of anxiety and depressive disorders was 48%³ in the post covid period. This is comparable to our research and shows similar results establishing the fact that the pandemic has had drastic effects on the mental health of students and youngsters. Sahibzada et al showed not a single case of severe depression while this study showed 10% which is alarming. Female students had 05 times more likelihood of disease than males under study.

LIMITATIONS

Our study was restricted to a small sample size (100 subjects) due to limited time and human power resources. The study was conducted only in one medical college hence the findings cannot be generalized to all the medical students in all medical institutes.

RECOMMENDATION

Parents and teachers, both should pay attention on the root cause of this ailment to reduce the magnitude and severity of this disease.

CONCLUSION

The findings of our study will be helpful for medical students across the country, to identify the risk of them being depressed, and to identify their stressors effectively. This is also alarming for the policy makers of medical studies, the college administration, and faculty members of this institute, to recognize that counseling desks are an immense need of hour in medical college setups.

Depression exists among the 46% of the students of MBBS relevant to their study years i.e. first professional examination to final professional examination. The most vulnerable population in our study was the

students of the first professional examination. The major contributory factor was the Covid-19 which enhanced the prevalence of the disease. Sadness was the most prominent clinical factor of the problem.

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