

DEPRESSION IN FEMALE MEDICAL STUDENTS OF VARIOUS PUBLIC SECTOR MEDICAL COLLEGES OF LAHORE.

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Abstract: Background and Objectives: The objective of the study is to find out the frequency of female medical students suffering from depression, effects of depression on their social and personal life, history of anxiety medication, and how the depression affects their perception of things and what can be the possible roots of depression among them. **Study design and Duration:** A cross-sectional study was carried out over a period of 3 months from 1st May to 30th of July 2014. **Study Setting:** Study conducted at various public sector Medical Colleges of Lahore (AIMC, SIMS, FJMC, KEMU). **Materials and Methods:** About 200 samples were collected by using Non probability / purposive sampling technique. Those respondents agreed to participate asked to sign informed consent. A self-designed questionnaire consisting of closed and open ended questions was provided to each respondent. Demographic information and possible reasons of depression was noted in structured questionnaire. Every respondent was guided how to fill the questionnaire and be assured that their response will be treated with utmost. Data entered and analyzed in SPSS Version: 17.0. **Results:** Almost 74.5% joined medical college during 18-20 year, 48.5% had history of depression during school, 61.5% had depression during professional exams, 63.0% had tried anti-anxiety medication few times in their life, and 57.5% felt pressure of medical school as part and parcel of this profession. 37.0% female medical students effected their perception of things, 45.0% said thinking about "I can't reach my goals" was major cause of our depression. **Conclusions:** Medical school is a time of significant psychological distress for students. Currently available information is insufficient to draw firm conclusions on the causes and effects of student depression. Large, perspective, multicenter studies are needed to identify personal and training-related feature that influence depression.

Key words: Anti-anxiety medicine, Depression in Medical students, Mental health

INTRODUCTION:

Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and sense of well-being. Depression among college students is extremely prevalent and widespread problem across the world. The college years provide a time of academic as well as personal growth for students. College students face depressors that differ from their peers who are not in college. Some of these depressors includes academic demands and financial pressures etc. Female students face academic pressures and expectations that are considered greater than what they had experienced in high school.² It has been reported that as many as one-third of female medical students are, "frequently overwhelmed by all they have to do".⁴

In this part knowledge about depression and related factors had been reviewed to introduce an overview about mental status of female medical students in college. Mental disorders are estimated to account for nearly one half of the total burden of disease for young adults in the world (WHO, 2008). In addition, a growing body of evidence suggests that mental health problems

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are numerous and increasing among students in institutions of higher education (U.S. Department of Education, National Center for Education Statistics, 2005a). For example, in a 2005 national survey of undergraduates, 10% reported "seriously considering attempting suicide" (American College Health Association, 2006), and in a 2005 national survey of college counseling center directors, 86% reported an increase in severe psychological problems among students.⁶ The American Psychiatric Association provides specific symptomatic criteria for the medical diagnosis of Major Depressive Episode in the book, *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (American Psychiatric Association, 2006). The symptoms indicative of a Major Depressive Episode includes the following:

- Depressed mood for most of the day, nearly every day as indicated by either subjective report or observation made by others.
- Markedly diminished interest or pleasure in all or almost all activities most of the day or nearly every day.
- Significant weight loss when not dieting or weight gain, or decrease or increase in appetite nearly every day.
- Insomnia or hypersomnia nearly every day.
- Psychomotor agitation or retardation nearly every day.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
- Diminished ability to think or concentrate, or indecisiveness, nearly every day.
- Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for

committing suicide.

- To meet the criteria for the medical diagnosis of Major Depressive Episode, at least five of these symptoms must be present for at least a two-week period of time, and cause distress or impairment in the individual's life (American Psychiatric Association, 2006). The occurrence of any of these depressive symptoms may increase the risk of developing a major depressive episode.⁶ Three factors felt to impact the adjustment to college life include the perception of social support (both from family and peers), spirituality and coping. To begin with, perception of strong social support is important for success in school and life. It has been reported that the greater an individual's perception of family support, friendship support and a supportive school environment, the lower incidence of depressive symptoms in females.^{7,8}

Secondly, studies have demonstrated an inverse relationship between spirituality and depressive symptoms in college students. Thus, higher levels of spirituality may be a protective factor against the development of depressive symptoms in college students.^{12,16} Finally, an individual's ability to cope in a stressful situation may have a direct effect on his or her physical and emotional health. People respond differently to potential causes of psychological stress, and cope with psychological stress in different ways. Female medical students are more prone to depression than their non-medical peers. Researchers recently surveyed first- and second-year medical students at the University of California, San Francisco (UCSF), and found that about one fourth were depressed⁴. Others have suggested that although the rate of depression among students entering medical

college is similar to that among other people of similar ages, the prevalence increases disproportionately over the course of medical college.

Laurie Raymond, a psychiatrist and the director of the Office of Advising Resources at Harvard Medical School in Boston, said that she met individually with 208 medical students (about one quarter of the student body) between July 2003 and July 2005⁸. Thirty-one students (15 percent) presented with self-described depression — 20 of them with transient, “reactive” depressed mood that improved with supportive counseling or therapy and 11 who had a history of major depression. The majority (130 students) consulted Raymond, because of concern about academic performance, but major depression was diagnosed in 25 of them. A fourth-year medical student at Harvard estimated that three quarters of her close friends in medical school have taken psychiatric medications at some point during the four years. The mental health of female college students is a growing public health concern. Particularly alarming is the prevalence of depression and risk of suicide in this cohort.

OBJECTIVES:

The objective of the study was to find out the frequency of female medical students at undergraduate level suffering from depression and its different roots.

MATERIAL AND METHODS:

Study Design: The research design chosen for this investigation was a cross-sectional descriptive correlation design. A cross-sectional study requires that all data be collected either at one time, or within a short period of time, and a correlation design is

appropriate when the available literature on particular topics demonstrates adequate information necessary to suspect the nature of the relationship between variables.

Study Setting and duration: The research was carried out in various Public Sector Medical colleges of Lahore (AIMC, SIMS, FJMC and KEMU) in 3 months from May 2014 to July 2014.

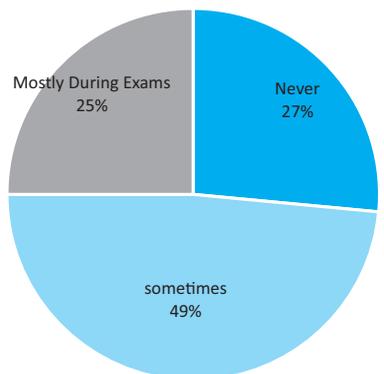
Data Collection and analysis: 200 respondents fulfilling the inclusion criteria were included. After informed consent demographic information and information regarding roots of depression was noted in a structured questionnaire. Data was entered and analyzed using SPSS version 17.0. Mean and standard deviation were calculated for numerical variables like age. Frequency tabulation was done for qualitative variables. Cross tabulation was done with age of joining medical school and depression during exams.

RESULTS:

Regarding age of female at the time of joining medical college, out of 200, 48 (24 %) were under 18 years, between 18-20 was 149 (74.50%) and above 21 was 3 (1.50%) Regarding history of depression during school, Out of 200, 97(48.50%) had depression during medical school, 50 (25%) during exams and 53 (26.50%) had never history of depression. With respect to history of depression during exams out of 200, 43 (21.5%) had history of depression during every exam, 123 (61.5%) during professional exams and 34 (17.00%) never felt depression. With respect to History of medication out of 200, 34 (17.00%) had no history of medication, 20 (10.00%) had history of medication every now and then,

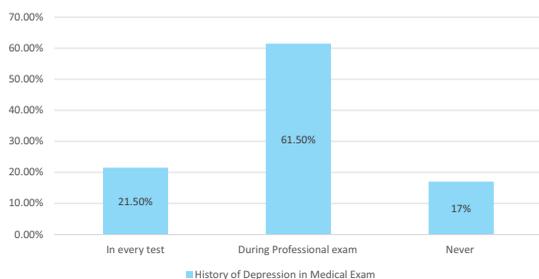
126 (63%) try it few times 20 (10%) was on prescription. Out of 200, 20 (12.05%) said every now and then, 160 (75.90%) try it few times, 20 (12.05%) I am on prescription.

History of Depression in Medical School

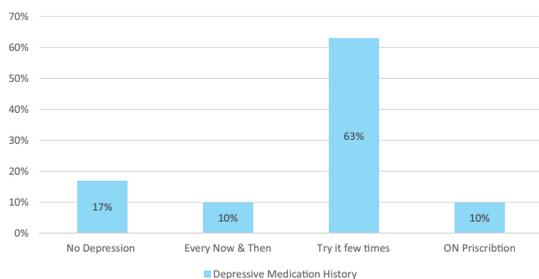


■ Never ■ sometimes ■ Mostly During Exams

History of Depression in Medical Exam



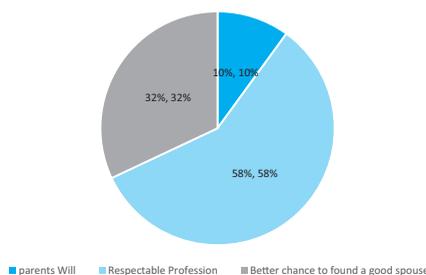
Depressive Medication History



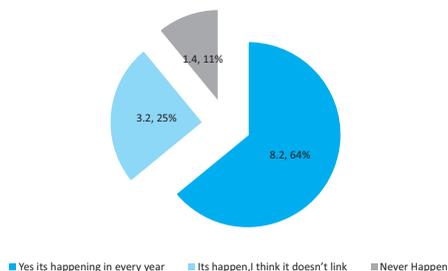
Regarding pressure of medical school, out of 200, 47 (23.5%) said they felt pressure, 115 (57.5%) said its part and parcel of any professional 38 (19%) today any offering

course is tough. Regarding reason of joining medical school, out of 200, 116(58%) said, it's a respectable profession, 64 (32%) answered, parents will, 20 (10%) said better chance to found a good spouse.

Reason of Joining Medical School



Experience of Menstrual Abnormalities in Exam



Regarding effect of medical school on social and personal life of female medical students, out of 200, 75 (37.5%) said it had totally changed my interaction with my friends, 91 (45.5%) said it had taken some toll on my routine however I'm finding it easy to adjust it now, 34 (17%) it had not affected my routine. With respect to effects of medicine on perception of things, out of 200, 59 (29.5%) said I've become pessimistic about things and think in a negative way, 74 (37%) said I've new lesson on life that I'm being equipped with the tools to save a life, 67(33.5%) said my perception is still the same. Regarding experience of menstrual abnormalities in exams, out of 200, 84 (42%) said, this had never happen, 65 (32.50%)

said, it's happened but I think it doesn't link, 51 (25.50%) yes it's something that happen every year. With respect to work in free time, out of 200, 103 (51.50%) said they go out with friends, 41 (20.50%) said with so much study I can't go out, 56 (28.00%) answered book reading.

Regarding causes of depression, out of 200, 50 (25%) said, studies and how I can give time to something else, 90 (45.00%) how I can't reach my targets and goals, 60 (30.00%) how people around me are not understanding my state of mind. In cross tabulation, out of 48 under 18 female medical students, 12 (25%) never felt depression, 30 (62.5%) felt sometimes, 6 (12.5%) mostly during exams. Out of 149 between 18-20 years, 41 (27.5%) felt never, 67 (45.0%) felt sometimes, 41 (27.5%) mostly during exams. Out of 3 above 21, 3 (100%) said during exams time. About history of depression in exams, out of 48, 11 (22.9%) felt depression in every test, 23 (47.9%) felt during professional exams, 14 (29.2%) never felt. Out of 149 in between 18-20, 32 (21.5%) in every test, 97 (65.1%) during professional exams, 20 (13.4%) never. Out of 3 above 21, 3 (100%) said during professional exams.

DISCUSSION:

In Pakistan, high frequency of depression was reported among female of young age. However, very limited evidence available on the psychological issues among health care provider. During the past few years, studies have been conducted to find out the reason for depression among women at different scale. However, the studies have given rise conflicting findings. It is highlighted in this study that female medical students, who falls among 18-20 years of age, are more prone to depression as compare to the other

age groups. History of depression is more common during professional exams because of the burden of study, where 61.5% female students suffer depression history. A study conducted by fourth year medical student at Harvard estimated that three quarters of her close friends in medical school have taken psychiatric medications at some point during the four years, in our study 75.90% female said these used anti-anxiety medication during their graduation few times. Depression affects academic performance in college. Studies suggest that college students with depression are prone to other disorders of psychiatry.

Depression is twice as common among women as among men. At least 20 percent least of women will experience at least one episode of depression across their lifetime. However, the factors affecting women are different for different age groups e.g. during adolescent it can be the school life exams and financial burden while during late adulthood it's related to relationship problems and in old age due to menopause it's related to hormonal imbalance. The best way to deal with depression is to eliminate it at its origin i.e. the stress should be dealt in terms of preventive rather than as a treatment strategy. Recognizing problem and dealing with them positively and pro-actively is the cost effective way in the management of depression. In this regard, an integrated approach for successful depression management should be applied, for example providing one to one counseling and psycho social services-clinical, occupational and health counseling, social support, relaxation activities and control of work. There are some limitations in our study. For example, considering only the female. Moreover, the sample size was small and there was no control group of

women. More discussion and research are required to understand this problem and to explore sources of psychological problems among doctors and their possible solution at large scale. Intervention studies also need to identify preventive measures and to assess the effects of any change secondary to implementation of preventive strategies.

CONCLUSION:

Medical school is a time of significant psychological distress for students. Currently available information is insufficient to draw firm conclusions on the causes and effects of student depression. Large, perspective, multicenter studies are needed to identify personal and training-related feature that influence depression.

CONFLICT OF INTEREST:

This study has no conflict of interest to declare by any author.

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