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## Level Of Depression Among Novice Physiotherapist Practitioner Of KPK, Pakistan

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### Article Details

**Keywords:** Depression, Physiotherapist, Kpk Physiotherapist, BDI

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### ABSTRACT

Background: Depression is one of the world's four major disorders and the leading cause of disease-related disability. Over 300 million individuals are said to be depressed around the world. It accounts for 4.5 percent of the global population. Physical therapy is a branch of rehabilitation science that treats a variety of diseases and conditions of the musculoskeletal and neurological systems, among others. It includes both direct and indirect access to patients for treatment, with treatment sessions based on tests, assessments, diagnosis, and prognosis, as well as a treatment plan based on the patient's condition. Martial and Methods: The sample size was 249. The Physiotherapist at Kpk was given Beck's depression inventory questionnaires as well as signed informed consent. Physiotherapists who agreed to participate in the study signed a consent form and completed a questionnaire. SPSS version 22 was used to analyze the data. For demographic data, the mean and standard deviation were calculated. Results: There were 249 participants in all, with 138 (55.4%) men and 111 (44.6%) women. The frequency of age between 23 and 27 years was 138 (55.4%), 27-30 years was 83 (33.3%), and age greater than 30 years was 28 (11.2%). 41 (16.5 percent) graduated in 2018, 27 (10.8%) in 2019, 69 (20.7 percent) in 2020, and 89 (45 percent) in 2021. 67.5 percent had just graduated from physiotherapy school, while 21.7 percent had earned a master's degree in the field. Beck's depression inventory's meaning and standard deviation are 2.06 and 1.13, respectively. Conclusion: According to the findings, the majority of kpk physiotherapists were not depressed, and half had only minor mood disturbances as measured by Beck's depression scale. Financial problems, low pay, and work discontent were determined to be the most common causes of depression.

## INTRODUCTION

Physical therapy is the field under rehabilitation science playing an essential role in health care system and can treat many diseases/conditions of musculoskeletal system and neurological system and much more, it includes direct and indirect access to patient for treatment, treatment sessions are based on tests, assessment, diagnosis, prognosis and treatment plan is based on patient's condition.(1) Usually in clinical setting the first diagnose is carried out by the physician most specifically by general practitioner and the red flags are rule out by them, prior to referral to the physiotherapist. But now, physiotherapists have enough knowledge and advanced skills to be the first line of contact. Many physiotherapist now refer the patients for diagnostic imaging, including plain X-rays, CT scans and MRIs to have an accurate diagnosis and to treat the patients accordingly.(2) Physiotherapists are an integral part of the clinical healthcare team, and thus need to understand other practitioners' roles and communicate effectively in order to provide quality care.(3)

Depression is one of the four major diseases in the world and is the most common cause of disability from diseases.(4) It is estimated that over 300 million people worldwide suffer from depression. It corresponds to 4.5% of the world's population.(5) A study was conducted in Pakistan to determine the prevalence of depression. In a Pakistani village, a two-phase survey of a broad population sample was conducted. Depressive disorders were found to be prevalent in 44.4 percent of the population (95 percent CI 35.3 to 53.6), with 25.5 percent of males and 57.5 percent of females.(6) According to a World Health Organization research, depression is the fourth most common cause of disability worldwide, and it is the largest non-fatal cause of disability, accounting for roughly 12% of total years lived with disability.(7) According to the WHO world health survey, the one-year prevalence of a depressive episode (international classification of illnesses, 10th revision) was 3.2 percent across all areas of the world (60 nations) (95 percent confidence interval 3.0 percent to 3.5 percent ). Depression is more common in people with a variety of medical disorders than in the general population, (8) with 5-10% of patients affected in primary care and 10-14% of patients under general hospital care.(9) The diagnosis and treatment of depression by general practitioners is not, however, always optimal. Workplace or job-related stress can increase the likelihood of a variety of negative effects.

Turnover, burnout, sick leave, and work-related musculoskeletal problems are all possible repercussions of workplace stress (WMSDs).(10) Mental health disease is under recognized in medical professionals. There are certain psychological conditions including depression and diseases related to cardiovascular system.(11) Physical therapists may feel high levels of workplace stress, according to some research, but it is difficult to evaluate the extent of the problem. The current research has ended. Interview and focus group studies are the most common types of research.(12, 13) Excessive workload at clinics and in administration is a major source of anxiety. Equipment, workforce, time, and other resources are also in short supply. There can be a conflict between personal ideas and clinical realities as physical therapists hold themselves to very high professional standards.(11) Workload constraints, deadlines, and workplace demand confront physiotherapists, and job stress may be perceived as a personal failure. The research on physiotherapists that have been undertaken so far shows solid evidence of potential difficulties in the psychosocial work environment that could lead to job or work stress. This research discovered concerns such as a lack of support at work, increased work pressures, limited self-control, and frustration with clients. Relationships with other professions may also be strained.(13) Studies on the conditions of risk and protection for the development of depressed symptoms are needed.(14)

## MATERIALS AND METHODS

## **SAMPLING TECHNIQUE**

Cross sectional survey was done, and convenient sampling techniques were carried out to include the participants in the study. Convenient sampling technique is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher.

## **SAMPLE SIZE**

Data was collected from a total of 249 students. The total population was 700 and the sample size was calculated using an online calculator “Raosoft” with confidence level of 95% and 50% response distribution.

## **STUDY DURATION**

The duration of study was 6 months.

## **DATA COLLECTION PROCEDURE**

After permission from the Research Ethical Committee of NCS University Swabi, Information about the study was given in written form to all the physiotherapist of kpk . Beck’s depression inventory questionnaires and written informed consent were provided to the physiotherapist. That therapist who was willing to be the part study signed the consent form and filled the questionnaire.

## **DATA COLLECTION TOOL**

Data was collected through Beck’s Depression Inventory Scale (BDI). The questionnaire consists of a total of 21 questions. The questionnaire was checked by the Research Ethical Committee of NCS University Swabi before administration to the Physiotherapist.

## **INCLUSION AND EXCLUSION CRITERIA**

Novice Physiotherapist of kpk with less than four experience and physiotherapist who are willing to participate in study were included in the study. Experience more than four years and other province of Pakistan were exclusion in the study.

## **DATA ANALYSIS**

Data was analyzed using SPSS version 25. Mean  $\pm$  S.D, range and standard deviation for demographic data were measured. Descriptive statistics were as frequency tables, bar graphs for association of another factor.

## **INFORM CONSENT**

All the necessary information about the study was provided to the Physiotherapist. Consent forms have been provided to the Physiotherapist and have been allowed to leave at any point for any reason. Physiotherapists were informed that their data would be kept confidential and would not be disclosed to anyone other than the supervisor.

## **METHODOLOGY**

The findings of this research cannot be extended to normal physical therapists practicing in other clinical or non-clinical settings. There hasn't been much research done to look at the sights of psychosocial work environments for physical therapists in Pakistani tuts. Physical therapy technicians and diploma holders were excluded from the study. After approval of our research proposal by the institutional review board, permission for study was taken from the ethical committee of NCS University Swabi. This was a cross-sectional survey, and data was collected from all fresh and novice physiotherapists of KPK, to find out the prevalence of depression among physiotherapists of kpk. Cross sectional survey was done, and convenient sampling techniques were carried out to include the participants in the study. Convenient sampling technique is a non-probability sampling technique where subjects are selected because of their convenient accessibility and proximity to the researcher. Data was collected from total of 249 Physiotherapist of kpk. The total population was 700 and the sample size was calculated

using an online calculator “Raosoft” with confidence level of 95% and 50% response distribution. The duration of study was 6 months. Beck’s depression inventory questionnaires and written informed consent were provided to the Physiotherapist of Kpk. That physiotherapist who was willing to be the part study signed the consent form and filled in the questionnaire. Data was analyzed using SPSS version 22. Mean  $\pm$  S.D, range and standard deviation for demographic data were measured. Descriptive statistics were as frequency tables, bar graphs for association of another factor.

## RESULT

The total participant was 249; 138(55.4%) males and 111 (44.6%) females. The frequency of age between 23-27 years was 138 (55.4%), 27-30 years were 83(33.3%) and age above 30 years were 28(11.2%). 41(16.5%) were graduated in 2018, 27(10.8%) were graduated in 2019, 69(27.7%) and 89(45%) were graduated in 2021. 67.5% were just graduated in physiotherapy, 21.7 were master in Physiotherapy. 5.2% were graduated plus some extra courses and 5.6% were masters in physiotherapy plus extra courses. 42 (16.9%) were doing just academic jobs, 38% were doing clinical jobs and 22.5% were jobless. By using the Beck’s Depression Inventory scale (n=95, 38.2%) were in the category of 1-10 (consider normal), participants (n=84, 33.7%) were in 11-16 range (mild mood disturbance), participant who were in range between 17-20 (borderline clinical depression) were (n=42, 16%), participant (n=14, 5.6%) were in range between 21-30 (moderate depression), participants who were in range between 31-40 (severe depression) were (n=14, 25.6%), and the participants who fell above 40 by using Beck’s Depression Inventory Scale are consider in extreme depression were (n=2, 1.4%). According to the above result, it showed that most of the participants were in Normal rang line of Depression (38.2%)

The Mean and SD of age was  $1.55 \pm 0.68$ . Likewise, the mean and SD of beck’s depression inventory  $2.06 \pm 1.13$ . With the comparison of age and BDI between 23-27 years the mean was 1.60, between the age of 28-30 years the mean was 2.68 and the mean of more than 30 years of age was 2.50. Same as age the comparison of gender with BDI; in male the mean was 1.91 and in female was 2.26. There have been no studies comparing the psychosocial work environments of other health care professions to the psychosocial work environments in physiotherapy settings. However, further studies with big samples are required for the physiotherapy work environment. The purpose of this study was to determine the prevalence of depression, stress, and anxiety among Pakistani physiotherapists, as well as the factors that influence them.

## DISCUSSION

Depression affects 20% of the world's population, while it affects 20% of Pakistan's population. With a gauge of 34%, it is more genuine. In the pathogenesis of depression, both hereditary and environmental factors play a role. Around 35.7 percent of Karachi residents suffer from emotional instability, while 43 percent of Quetta residents and 53.4 percent of Lahore residents suffer from depression.(15) Depression has a significant impact on people's lives and quality of life. The purpose of this study was to determine the prevalence of depression, stress, and anxiety among Pakistani physiotherapists. Enormous studies have been conducted in western countries to assess levels of stress and other mental health related variables in various professions, but none has been conducted previously on physical therapists. Similarly in Pakistan no previous research was conducted on this topic. According to the findings, 48.7% of physical therapists have mild depression, 23.5 percent have moderate depression, and 2.9 percent have severe depression, while 24.9 percent had no depression. Other aspects were investigated in order to better understand the causes of the high frequency of depression. Physiotherapists in Pakistan do not have a good financial situation. Financial difficulties can

contribute to depression, as the majority of therapists face financial difficulties and view their pay in relation to their profession. Physiotherapy students in Pakistan spent five years of their lives pursuing a doctoral degree, followed by two years of MS/MPhil studies. Years of education are equivalent to those of an MBBS student. However, in Pakistan, the profession of physiotherapy is not given the respect it deserves. An MBBS can become a medical officer without any experience and earn a starting salary of around 70-80K, but physiotherapy jobs require at least three years of experience and pay less than half of what doctors earn. Physiotherapists may experience despair and frustration as a result of this. The majority of therapists here are dissatisfied with their work. The lack of recognition from the administration and the poor wage structure were the sources of job unhappiness. More jobs for young physiotherapy graduates should be announced by the government. Salary packages should be comparable to those offered to other health professionals. A separate council should be established to fight for the professional's needs. There are studies conducted previously that reported that depression rate is higher in individuals who are separated, divorced, or widowed.(11) In this study, four out of six divorced couples were depressed. As a result, there is a relationship between depression and separation. Those in a relationship also reported higher levels of depression than those who are single. Although the question regarding being in a relationship was not culturally relevant, it had to be included in this study because the participants were young graduates. Physical therapists have also been shown to endure high levels of workplace stress in earlier studies. However, determining the scope of the problem is challenging. To date, the majority of the research has consisted of focus groups and interviews.(13, 16) Grembowski D, Bovier PA, and Seo Y in their studies show that there is a strong correlation between salary and job satisfaction.(17, 18) The majority of physiotherapists in this study were dissatisfied with their pay packages. Low pay packages result in a poor financial situation, which can lead to melancholy, worry, and anxiety. Another study conducted by Bodur S in Turkey found that salaries and working conditions were the primary sources of dissatisfaction among health-care providers.(15) This study discovered a link between low financial status and work dissatisfaction, as well as depression. Any sort of mental illness can have a severe impact on cognitive growth and learning, as well as a high cost to the individual and society, such as a lack of interest in working, suicide, marital issues, and a reduced capacity to work efficiently. As a result, the working circumstances of physiotherapy facilities should be enhanced, as should their ability to deal with stress if it arises. Peer group counseling for anxiety and depression victims should be available in hospitals and colleges through rehabilitation programs. Physiotherapists, on the other hand, should focus on and maintain their mental health and well-being throughout their careers.

## CONCLUSION

According to the findings, the majority of kpk physiotherapists were not depressed, and half had minor mood disturbances as measured by Beck's depression scale. Financial problems, low pay, and work discontent were determined to be the most common causes of depression, stress, and anxiety.

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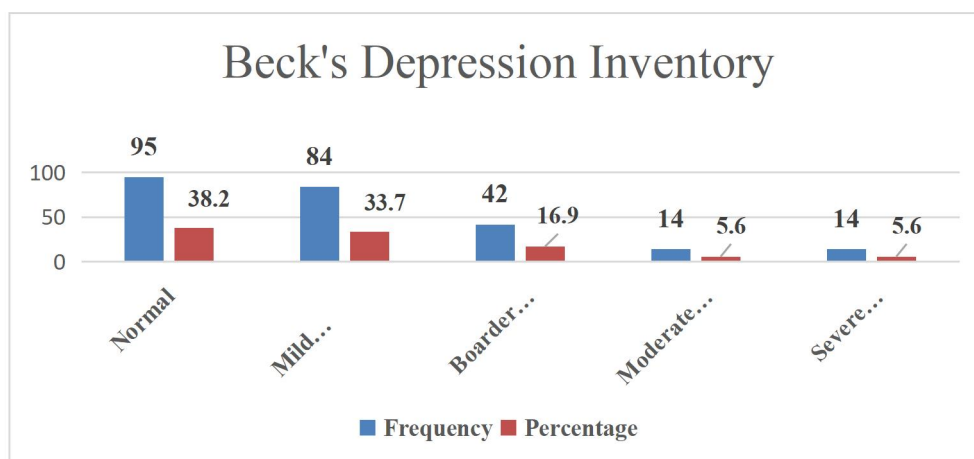
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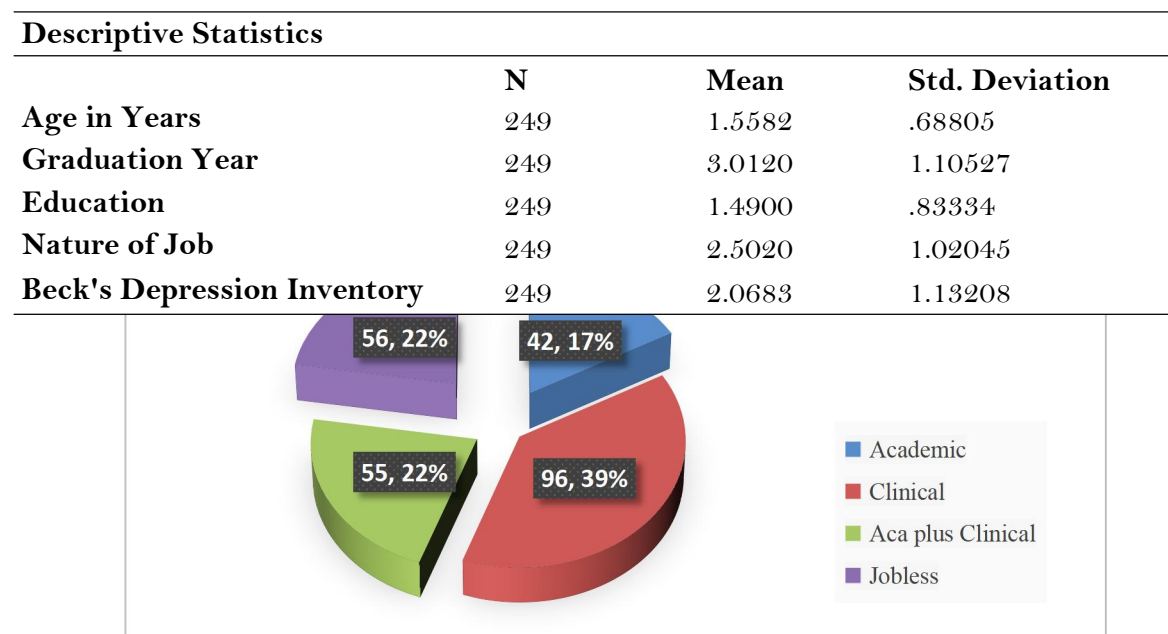
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**TABLE 1: SHOWING THE DESCRIPTIVE STATISTICS OF AGE, GENDER, GRADUATION, EDUCATION, NATURE OF JOB AND BDI SCALE**



**FIGURE 1: SHOWING THE FREQUENCY DISTRIBUTION AND PERCENTAGE OF BDI SCALE**



**FIGURE 2: SHOWING THE FREQUENCY AND PERCENTAGE OF NATURE OF JOB**