

PREVALENCE OF DEPRESSION AND ITS ASSOCIATED FACTORS AMONG HIGH SCHOOL TEACHERS IN DIR(L) KPK, PAKISTAN

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Abstract

In the present study, the prevalence of depression and its associated factors among high school teachers in district Lower Dir, KPK is investigated. Cluster random sampling is used to identify the representative sample from the population. A total of 180 teachers are selected from the study area. Their depression level is measured by scale (Centre for Epidemiological Studies Depression Scale Short Form, or CESD-10). A structured questionnaire is used for data collection. The data is presented by frequency distribution. The linear regression model is applied to assess the dependency of prevalence of depression on its risk factors. The model identifies only one variable out of ten (gender, age, residence, education level, income, marital status, chronic illness, workload, family support) variables, family support which is responsible for prevalence of depression. This indicates that in the study area, lack of family support is the major risk factor for incidence of depression.

INTRODUCTION

The high incidence, challenging nature of treatment, and frequently persistent nature of mental health problems make them an important public health concern. Among mental disorders, depression is notable due to its chronic nature, challenging treatment, and recovery (Bete et al., 2022). One of the main causes of disability in the world is depression. According to a 2017 World Health Organization (WHO) report, it is the leading cause of disability universal, affecting over 322 million entities and accounting for 7.5% of all years lived with a disability (Lim et al., 2018).

In the general population, depression is the most prevalent mental health problem. Sadness, loss of interest or gratification, guilt or low self-esteem, sleep or eating disturbances, fatigue, and difficulty

focusing are some of its defining features. When depression reaches its worst stage, it might raise death risk and result in suicide. Depression significantly reduces a person's quality of life and occupational potential, and frequently it has a chronic impact (Puthran et al., 2016).

The regularity of depression in the general population is 6.6% within a year and 16.2% over a lifetime, making it a global issue. Due to its multifaceted nature, depression places an important tension on society by impairing social, professional, and interpersonal functioning (Kidger et al., 2016). Significant Changes in physical, emotional, and social life occur during adolescence, a crucial developmental stage that frequently results in emotional suffering and an elevated risk of Depression.

Compared to the general population, teachers are more prone to suffer from depression. Bete et al. (2022) determined the prevalence of depressive symptoms, and the factors associated with them among public school teachers. They used Depression, Anxiety, and Stress Scale (DASS-21) to gather data. According to their findings, 44.7% of educators experienced symptoms of depression. Their study identifies that alcohol consumption, the prevalence of stress and anxiety symptoms, and moderate to severe job stress are the primary factors associated with depression.

Khan et al. (2024) conducted study to assess the prevalence of depression and its associated factors among undergraduate students in the Lower Dir region of Khyber Pakhtunkhwa, Pakistan. The study included 540 students from various colleges. Depression was measured using the Centre for Epidemiological Studies Depression Scale Short Form, or CESD-10. Their results showed that 20% of the students had depression overall, and 2.4% of the students had severe depression. Using binary logistic regression analysis, it was discovered that PTSD, sleep issues, low income, and a negative family history were all significant risk factors for depression.

Lim et al. (2018) run meta-regression which revealed that response rates, the proportion of female participants, and the year of publication were the main causes of heterogeneity. These results demonstrate the impact of methodological and sociodemographic factors on depression estimates and provide a benchmark for assessing changes in mental health patterns in tandem with the spread of online health information. Puthran et al. (2016) examined the prevalence of depression among medical students worldwide by a comprehensive evaluation of 77 papers. More than 62,000 medical students participated in these studies. According to their analysis, depression affects roughly 28% of medical students.

Kidger et al. (2016) examined the effects of school-related factors on teachers' mental health and well-being. According to their findings, over 19% of instructors suffered from moderate to severe depression, and many had poor mental health. Hadi et al. (2008) examined the prevalence of depression in secondary school teachers as well as its

contributing factors. According to their survey, 49.1% of instructors suffered from depression, the majority of which were light. They investigated that depression was associated with several work-related characteristics, including inadequate decision-making capacity, job expectations, and employment instability. Dilekmen and Erdem (2013) investigated elementary school teachers' depression levels according to a variety of criteria, including work type, school location, age, gender, marital status, and job satisfaction. Sample size of 194 instructors from 40 randomly chosen primary schools in Erzurum, Turkey, participated in the study. They used Beck Depression Inventory and a personal information form to gather data. According to their findings, there was no discernible variation in depression levels by gender, age, marital status, years of experience, classroom type, employment status, or school location. Their study further revealed that depression was more common among instructors who had more students in the classroom, were less satisfied with their jobs, were less accepted by their employers, and felt that their personalities did not fit the profession.

Zhou et al. (2021) investigated the prevalence of depression among Chinese teachers during the COVID-19 pandemic. They conducted an online survey consisting of 1,096 instructors. According to their findings, 56.9% of educators suffered from depression. Among the main variables associated with increased depression were being at least 41 years old, participation in the management of epidemics, fears of extended school closures, sleeping fewer than six hours and exercising for less than half an hour each day, reducing family time, concerning yourself with COVID-19 being under a lot of stress and lacking mental toughness. Some other studies were conducted on depression, stress and anxiety in the study area, but the population was different from the current study (Haq et al., 2024; Haq, Ullah and Khan, 2022). Moreover, in the study area various studies have been conducted (Khan, Haq, and Dawood, (2023; Khan et al., 2022; Khan et al., 2022a; Khan et al., 2022c; Khan, Haq and Ali, 2022; Khan, 2012; Khan et al. 2022d; Khan, Azeem and Irfan, 2021; Khan, Saeed and Farihasami, 2022; Khan et al, 2023; Ismail et al., 2023; Khan et al., 2022e, Khan et al., 2021), but the prevalence of

depression among school teachers is conducted for the first time. This study not only provides the percentage of teachers having depression but also investigates the significant associated risk factors to the prevalence.

Material and Method

The population for this study consists of high school teacher, both male and female of the district Dir lower, Khyber Pakhtunkhwa, Pakistan. The total high school in the district Dir lower is 64. The data was collected from the high school of the district Dir lower. Some advanced sampling schemes are available in literature (Khan et al, 2025; Khan et al., 2024; Khan and Ali, 2022; Khan, Ismail and Rooh-ul-Amin, 2022; Khan et al., 2022; Khan, Ismail and Samawi, 2020; Khan and Ismail, 2019), but a suitable sampling method for the current study is cluster sampling method. Schools are considered as clusters, and twenty schools (clusters) are selected randomly. For the collection of data, a questionnaire was developed, the researcher visits each high school and obtains the necessary permission from the relevant authorities before approaching the teacher. Simple and easy are used in a questionnaire so that the respondents would easily understand as well as answer every question. Possible answers were provided to enable respondents to tick whichever

answer they found suitable in terms of their response to the question.

Results and Discussion

The aim of this study is to investigate the prevalence of depression among schoolteachers along with the factors responsible for incidence of depression. The study consists of 180 sample having 90 male and 90 female. Table 1 indicates that the depression level of 138 (77) % teachers are considered normal. While the remaining 23% have depression. There is distribution from low to high is as, 26(14%) teachers have depression level of 26 to 30, 6 (3%) teachers have depression level 30 to 35, same number of teachers have depression level 36-40, the most severe depression that is above 40, occurs to 4(2%) of teachers.

This table shows that out of 180 teachers, 39 (21.67) % of teachers have aged from 26 to 31 years, 49 (27.23%) of teachers have age from 32 to 37 years, 38 (21.12) % of teachers have age from 38 to 43 years, 24 (13.34%) of teachers have age from 44 to 49, and 3 (12.78%) have aged from 50 to 59 years.

The education level of teachers is also shown in Table 1. Only one teacher is found who have 14 years of education, 131 (72.78%) have 16 years of education, 43(23.89 %) have 18 years of education. Some of the teachers (2.78%) are highly qualified, they are PhD degree holders.

Table 1 Summary of Collected Data

| Variables | Categories | Frequency | Percentage |
|----------------------|--------------|-----------|------------|
| Depression | less than 26 | 138 | 77 % |
| | 26–30 | 26 | 14 % |
| | 31–35 | 6 | 3 % |
| | 36 - 40 | 6 | 3 % |
| | 40 and above | 4 | 2 % |
| Age | 26 to 31 | 39 | 21.67 % |
| | 32 to 37 | 49 | 27.23 % |
| | 38 to 43 | 38 | 21.12 % |
| | 44 to 49 | 24 | 13.34 % |
| | 50 to 59 | 23 | 12.78 % |
| Education (in years) | 14 | 1 | 0.56 % |
| | 16 | 131 | 72.78 % |
| | 18 | 43 | 23.89 % |
| | 20 | 5 | 2.78 % |

| | | | |
|----------------|----------|-----|---------|
| Marital status | Single | 23 | 12.78 % |
| | Married | 156 | 86.67 % |
| | Divorced | 1 | 0.56 % |
| | | | |
| Family support | No | 40 | 22.22 % |
| | Yes | 140 | 77.78 % |

Table 1 reveals that 23(12.27%) teachers are single, 156 (86.67%) teachers are married, and 1 (0.56%) teacher was divorced. Moreover, the Table indicates

that 40 (22.22%) teachers did not feel socially supported by family, and 140(77.78%) teachers felt socially supported by friends or family.

Table 2 Result of Linear Regression Model

| | Co-efficient | SE coefficient | T Value | P Value | VIF |
|----------------|--------------|----------------|---------|---------|------|
| Constant | 19.80 | 1.70 | 11.63 | 0.00 | |
| Family support | -4.78 | 1.93 | -2.49 | 0.014 | 1.00 |

The result of regression model is shown by Table 2 which indicates that family support is significantly related to prevalence of depression. The constant (intercept) has a coefficient of 19.80, indicating that when there is no family support, the assumed value of the outcome is 19.80. This coefficient is statistically significant with a p-value of 0.00. Family support itself has a coefficient of -4.78, signifying an inverse relationship with the outcome variable, family support leads to a 4.78-unit decrease in the outcome variable. The Needham (2008) found that low family support is one of the risk factors of prevalence of depression. Thus, our result matched their study.

This effect is statistically significant ($p = 0.014$). The Variance Inflation Factor (VIF) for family support is 1.00, confirming the absence of multicollinearity and ensuring the constancy of the regression estimates.

Conclusion

The study reveals a high percentage of depression, that is, 20% among the school-teachers in study area. This prevalence is alarming, which not only negatively affects the teachers themselves, but also their students suffer. The factor responsible for such a high prevalence of depression is lack of family support. This is the only predictor variable (out of ten variables) which is significantly associated with prevalence of depression. This indicates that family support plays a vital role in the prevalence of depression among teachers in the study area.

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