RISK FACTORS AND HEALTH RELATED QUALITY OF LIFE AMONG ADULT PATIENTS OF DEPRESSION PRESENTING AT PSYCHIATRIC OPD CLINIC OF AZIZ FATIMA MEDICAL COLLEGE AND HOSPITAL FAISALABAD.

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ABSTRACT… Objectives: To determine the risk factors of depressive disorders and health related quality of life among adult patients of depression presenting at psychiatric OPD clinic of Aziz Fatima Hospital Faisalabad. Study Design: Cross-sectional study. Setting: Psychiatric OPD clinic of Aziz Fatima Hospital Faisalabad Pakistan. Period: 1st August 2019 to 31st December 2019. Material & Method: 150 patients for the screening of depression Patient Health Questionnaire (PHQ) was used. For measuring health related quality of life World Health Organization Quality of Life (WHOQOL-Brief) was used. Results: It was found that out of 150 patients with depressive disorder 104 (69.3%) were female and 46 (30.7%) were male patients. Findings of the study assessed that depressive disorder not only impacts on the patients’ mood but it also impairs the individuals overall perception of their general health, physical health, psychological wellbeing, social relationship and also distorted perception of their surrounding psychosocial environment. Conclusion: Depressive disorder is common in patients visiting psychiatric OPD clinic and findings of study suggested that age, education level, socio-economic status, death of parent at early age, unemployment, workplace issues, parental separation, loss of partner and family history of depression are important demographic variables which plays the role of significant risk factor for depression and impairs the quality of life among depressive patients.

Key words: Depressive Disorder, Quality of Life, World Health Organization.

INTRODUCTION
Depression is one of the most prevalent disorders and it is quite common among developing countries like Pakistan. World Health Organization (WHO) states that globally 350 million individuals suffered from depression.¹

Depressive disorder is a mood disorder characterized by the persistent presence of low mood, lack of interest and pleasure, reduced self-esteem, hopelessness, and reduced energy, reduced sleep and appetite for at least two weeks. Presence of symptoms for the longer period of time leads to social and professional dysfunction.² Patients with depressive disorder also experience somatic symptoms that mainly appear as gastrointestinal symptoms, body aches, headache, easily fatigue and generalized weakness in the body. In developing countries like Pakistan different studies conclude that approximately 44.4 % of the population suffered from depression which is higher than other developing countries.³

For the general population the likelihood of developing the depression is 5%-12% in males where as in female is 10%-25%. Previous studies in Pakistan found different rate of prevalence of depression among three different cities. In the Punjab, Lahore had the highest frequency of depressive disorder which has been estimated around 53.4% of population of city.⁴

In Pakistan risk factors associated with the increased prevalence of depression among population are being explored. Previous studies indicated that the social factors such as socioeconomic status; education and family...
system are the contributing factors for women in depression.\textsuperscript{5}

Growing uncertainty, terrorism, political instability, socio-economic problems, food shortage, global economic slowdown, rising unemployment and other problems are also associated with increased risk of depression in Pakistan.\textsuperscript{5}

Quality of life is described as the individual’s subjective perception of their overall well-being and impaired quality of life is explained by the difficulties in physical and psychological well-being of individuals due to the presence of illness.\textsuperscript{7} As reported by the previous studies quality of life is significantly impaired among the patients of depression and limitations explained by the patients are same as those who suffered with psychological illness.\textsuperscript{6,8} Assessment of a patient’s quality of life allows multidimensional evaluation of both the results of treatment and rehabilitation, and the changes in perceived health. Quality of life assessments have in recent years drawn growing interest in contemporary research. In addition to specific symptoms and objectively observable impediments, it is important to estimate the level of subjectively perceived disability in order to obtain an overall view of a patient’s functional limitations and to assist him or her to cope with the problems.

The purpose of the present study was to find out the underling risk factor associated with the increase rate of depression among patients presenting to psychiatric OPD clinic of Aziz Fatima Hospital Faisalabad Pakistan for Five months duration from 1\textsuperscript{st} August 2019 to 31\textsuperscript{st} December 2019. The permission about conducting a study and protocols used in the study were approved by the Institutional ethical review committee of hospital. A total sample of 150 patients visiting the psychiatric OPD of hospital was drawn for the purpose of study. Participants were ensured that their information would be kept confidential and they have right to withdraw at any stage of the study. The age range of the patients was 18 to 60 years. For the screening of depressive disorder Urdu version of Patient Health Questionnaire (PHQ) was used.\textsuperscript{10} PHQ-9 being a depression module is not only used as the screening tool for the depression but it is also widely used to evaluate the severity of the depression. PHQ-9 measure the nine criteria symptoms of the DSM-V.\textsuperscript{10} For the assessment of quality of life Urdu version of World Health Organization Quality of Life 26 was used in the present study. WHO-QOL is a 26-item, self-report measure designed to measure quality of life.\textsuperscript{11} Twenty-four items measure the four domains of quality of life: physical, psychological, social, and environmental, and the other two items measure overall quality of life and general health. The score for each question ranges from 1 to 5, and higher scores reflect higher QOL. For the analysis of data SPSS 22 was used. To find out the strength of a linear association between variables, Pearson Product Moment correlation was used. And for gender differences t test was used in the study.

RESULTS
A total of 200 patients were screened for depressive disorder. Majority of the patients visiting the psychiatric OPD clinic were female (n= 104, 69.3\%). Patients age range was 18-60 and most of the female patients diagnosed with depression were married (n=76, 50.7\%) while married male (n=22, 14.7) ratio was also high. The majority of the patients (70) had primary to secondary level education, 26 respondents were holding bachelor’s degrees, whereas 38 patients had master level of education. Amongst the patients 68(45.3\%) were from the joint family system and 82 people belong to nuclear family system. In present study 56\% people belong

MATERIAL & METHODS
This descriptive cross-sectional study was conducted in the Psychiatric OPD Clinic of Aziz Fatima Hospital Faisalabad Pakistan for Five months duration from 1\textsuperscript{st} August 2019 to 31\textsuperscript{st} December 2019. The permission about conducting a study and protocols used in the study were approved by the Institutional ethical review committee of hospital. A total sample of 150 patients visiting the psychiatric OPD of hospital was drawn for the purpose of study. Participants were ensured that their information would be kept confidential and they have right to withdraw at any stage of the study. The age range of the patients was 18 to 60 years. For the screening of depressive disorder Urdu version of Patient Health Questionnaire (PHQ) was used. PHQ-9 being a depression module is not only used as the screening tool for the depression but it is also widely used to evaluate the severity of the depression. PHQ-9 measure the nine criteria symptoms of the DSM-V. For the assessment of quality of life Urdu version of World Health Organization Quality of Life 26 was used in the present study. WHO-QOL is a 26-item, self-report measure designed to measure quality of life. Twenty-four items measure the four domains of quality of life: physical, psychological, social, and environmental, and the other two items measure overall quality of life and general health. The score for each question ranges from 1 to 5, and higher scores reflect higher QOL. For the analysis of data SPSS 22 was used. To find out the strength of a linear association between variables, Pearson Product Moment correlation was used. And for gender differences t test was used in the study.

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to the low socio-economic system. Out of the total sample of 150 patients, 39 (26.0%) were unemployed, 32 (21.3%) patients were those who lost their parents at an early age, 83 (38%) patients reported with domestic issues, 38 (25.3%) patients were facing issue on their workplace, 16 (10.7%) patients reported parental separation, 27 (18.0%) patients were those who lost their partner, 39 (26.0%) patients with depressive disorder were those who had a family history of depression.

| Table-I. Frequency distribution of demographic variables of study (N=150) |
|---------------------------------------------------------------|
| **Female** | **Male** | **Total (%)** |
|---|---|---|
| **Age** | | |
| 18-25 | 35 (30.0) | 15 (10.0) | 50 (36.67) |
| 25-40 | 37 (24.6) | 17 (11.3) | 54 (36.0) |
| 40-50 | 22 (14.6) | 3 (2.0) | 25 (16.6) |
| 50-60 | 10 (6.7) | 10 (6.7) | 20 (13.3) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Education** | | |
| Preliterate | 13 (8.7) | 3 (2.0) | 16 (10.7) |
| Primary-Secondary | 45 (30.0) | 25 (16.7) | 70 (46.7) |
| Bachelor | 24 (16.0) | 2 (1.3) | 26 (17.3) |
| Master | 22 (14.7) | 16 (10.7) | 38 (25.3) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Marital Status** | | |
| Married | 76 (50.7) | 22 (14.7) | 98 (65.3) |
| Single | 28 (18.7) | 24 (16.0) | 52 (34.7) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **family system** | | |
| Nuclear | 56 (37.3) | 26 (17.3) | 82 (54.7) |
| Joint | 48 (32.0) | 20 (13.3) | 68 (45.3) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Death of Parent at early age** | | |
| Yes | 26 (17.3) | 6 (4.0) | 32 (21.3) |
| No | 78 (52.0) | 40 (26.7) | 118 (78.7) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Socio-economic status** | | |
| Low | 59 (39.3) | 26 (17.3) | 85 (56.7) |
| Middle | 36 (24.0) | 16 (10.7) | 52 (34.7) |
| High | 9 (6.0) | 4 (2.7) | 13 (8.7) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Unemployment** | | |
| Yes | 25 (16.7) | 14 (9.3) | 39 (26.0) |
| No | 79 (52.7) | 32 (21.3) | 111 (74.0) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Workplace- issues** | | |
| Yes | 8 (5.34) | 30 (20.0) | 38 (25.3) |
| No | 85 (56.7) | 27 (18.0) | 112 (74.7) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Domestic issues** | | |
| Yes | 57 (28.0) | 26 (10.0) | 83 (53.8) |
| No | 47 (31.3) | 20 (13.3) | 67 (44.7) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Parental-separation** | | |
| Yes | 14 (9.3) | 2 (1.0) | 16 (10.7) |
| No | 96 (64.0) | 38 (25.3) | 134 (89.3) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Loss of partner** | | |
| Yes | 19 (12.7) | 8 (5.3) | 27 (18.0) |
| No | 85 (56.7) | 38 (25.3) | 123 (82.0) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
| **Family history of illness** | | |
| Present | 33 (22.0) | 6 (4.0) | 39 (26.0) |
| Absent | 71 (47.3) | 40 (26.7) | 111 (74.0) |
| Total | 104 (69.3) | 46 (30.7) | 150 (100.0) |
### DEPRESSION PRESENTING AT PSYCHIATRIC OPD

#### Table-II. Summary of Inter-correlation among scores on patient health questionnaire (PHQ), and quality of life (WHOQOL-BREF) (N=150)

| Variables      | Male (SD)   | Female (SD) | df | t   | LL | UL | Cohen's d |
|----------------|-------------|-------------|----|-----|----|----|-----------|
| PHQ            | 15.00(5.88) | 18.44(6.99) | 148| 3.101** | 1.24 | 5.64 | 0.532     |
| WHOQOL         | 72.95(19.71)| 54.32(15.86)| 148|5.60*** |25.25|11.99|1          |

#### Table-III. t-test for gender difference on patient health questionnaire (PHQ) and quality of life (WHOQOL-BREF) (N=150)

| Variables      | Male (SD) | Female (SD) | df | t   | LL  | UL  | Cohen's d |
|----------------|-----------|-------------|----|-----|-----|-----|-----------|
| Physical-health| 10.95(3.07)| 7.53(2.62)  | 148| 6.55*** | 4.45 | 2.37| 1.19      |
| Psychological  | 10.94(3.03)| 8.60(2.76)  | 148| 4.46*** | 3.38 | 1.29| 0.80      |
| Social-relationship | 11.10(4.20)| 8.41(5.15)  | 148| 4.46 | 4.27 | 1.10| 0.57      |
| Environment    | 11.42(4.40)| 9.02(2.91)  | 148| 3.67**| 3.81 | .977| 0.64      |

#### Table-IV. t-test for gender difference on quality of life (WHOQOL-BREF) (N=150)

| Gender     | Female | Male | Total |
|------------|--------|------|-------|
| Infertility| 6      | 4    | 10    |
| Diabetes   | 5      | 7    | 12    |
| Hypertension| 7     | 5    | 12    |
| Asthma     | 2      | 1    | 3     |
| COPD       | 2      | 0    | 2     |
| BPH        | 1      | 0    | 1     |
| Stroke     | 5      | 0    | 5     |
| Chronic hepatitis C | 4  | 1    | 5     |
| Cardiovascular disease | 2 | 3    | 5     |

#### Table-V. Comorbid medical condition in depression (N=150)

| Gender                  | Male | Female | Total |
|-------------------------|------|--------|-------|
| Minimal                 | 7    | 2      | 09    |
| Mild                    | 8    | 3      | 11    |
| Moderate                | 13   | 22     | 35    |
| Moderate severe         | 21   | 33     | 54    |
| Severe                  | 14   | 27     | 41    |

#### Table-VI. Severity index by PHQ-9 (N=150)
DISCUSSION
Depression is a highly prevalent disorder that can affect individuals with any age, ethnicity, gender, and people of every walk of life. The present study identifies the risk factors associated with diagnosis of depressive disorder and its impact on the quality of life in a private tertiary care hospital Faisalabad, Pakistan. The results of the researches indicated that depression is more common psychiatric disorder among women and female working as housewives subjected to domestic pressures were more prone to develop depression. Our study also found that the education level of the patients was associated with prevalence of depression. In the present study, the majority of the patients were not highly educated which contributed to the severity of their illness. Results of the previous studies indicated that the prevalence of depression is less in people with the high level of education. Results of the our study also suggested that the death of a patient’s parent at an early age was also associated with depressive symptoms since early age. In developing countries like Pakistan socioeconomic status of the patients also play a significant role in the outcome of depression symptoms.

The study also found an association of depressive symptoms and socioeconomic status of patients. Patient with low socioeconomic status was more prone to depression because of their financial burden and in Pakistan most of the people living in joint families have to take financial responsibilities of their family alone. Previous studies also reported the low level of socioeconomic status is related to the high risk of depression. Findings of the present study also suggested that unemployment among young male and female was also associated with depressive symptoms in our society which is also consistent with the other studies. Studies found that people who are unemployed had twice the risk of depressive disorder as compared to those who are employed.

In male patients who are employed our findings of the study showed that issue relating to their job stress such as long working hours and lack of incentives was associated with the risk of depression. In the young patients’ parental separation was found as a risk factor for the outcome of the depressive disorder. Previous studies also reported the parental separation increase the risk of depressive disorder among young adults. Patients who had experienced the loss of their partner also reported significant high level of depression. Studies reported that minor level of the depression roots from the reaction to the stressors of life. In our study family history of patients with psychiatric illness also play a significant risk factor in their diagnosis of depression. Present study also highlighted the gender differences in the outcome of depression. Previous studies also explained the high rate of depression prevalence among women.

Our studies indicated that among the depressive patients quality of life is significantly impaired. This impairment was observed in all domains of quality of life of patients. Findings of the study assessed that depressive disorder not only impacts on the patients’ mood but it also impairs the individuals overall perception of their health, physical health, psychological wellbeing, social relationship and also distorted their perception of their surrounding environment. Our findings are in line with previous studies which also reported that depression deteriorated the physical health of the patients and the severity of depression significantly impairs the quality of life among patients.

We also found the bodily pain, headache and hindrance in physical functioning also impair their general health perception. In female patient’s physical health, psychological well-being, social relationship and their perception about their environment is significantly impaired. In the patient with a severe level of depression, their perception of their physical health is highly distorted due to which patient experience themselves as being physically ill. Studies suggested that this is very important in general practice because patients with severe depression complain about somatic symptoms to the general physicians.

In present study depression is also associated
with other medical conditions among patients. Previous studies suggested that in primary care depression often co-morbid with other medical condition and one-third to half of these cases are not properly diagnosed with depression. Such as infertility being a distressful experience for people it also impact the psychological well-being of patients and depression is one of the mental disorder that significantly affect the quality of life among these patients. It was also found out that depression also contribute to the high risk of diabetes. In other medical conditions such as asthma, hypertension, Benign Prostatic Hyperplasia, Chronic Obstructive Pulmonary Disease, stroke and chronic hepatitis depression is potential risk factor that significantly impacts the mental well-being of patients and their follow-up with treatment.

DECLARATIONS
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