

Depression in females: comparison of patients visiting urban and rural teaching hospitals of Peshawar, Khyber Pakhtunkhwa

Laiba Shams, Musa Kakakhel, Shazma Majeed, Hasnain Khan, Hamza Khan, Sidra Sajid

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Author Information

From: Rehman Medical Institute, Peshawar, Khyber Pakhtunkhwa, Pakistan

Dr. Laiba Shams
House Officer
(Corresponding Author)
Email:
laibashams78@gmail.com

Dr. Musa Kakakhel
House Officer

Dr. Shazma Majeed
House Officer

Dr. Hasnain Khan
House Officer

Dr. Hamza Khan
House Officer

Dr. Sidra Sajid
House Officer

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ABSTRACT

Introduction: Even though frequency of depression is documented globally, the spectrum of depression and its inciting factors in Pakistan are unique to the local cultural and social beliefs.

Objective: To compare the status of depression and its provoking socio-cultural factors among urban and rural females attending selected hospitals of Peshawar.

Materials & Methods: A cross-sectional comparative study was conducted from March to May 2017 on 93 female patients attending two selected urban and rural teaching hospitals of Peshawar. Data were collected on Beck Depression Inventory through convenience sampling, and were analyzed for descriptive statistics by SPSS version 20. Comparisons were done by the Chi Square test and the Student's T test keeping $p \leq 0.05$ as significant.

Results: Out of 93 female patients, a final 89 females (53 urban and 36 rural) were included due to incomplete data entries. More urban females were in the normal, mild or borderline clinically depressed categories (38/53, 71.7%), compared to rural females (15/36, 41.7%), more of whom were in moderate, severe and extremely depressed categories (21/36, 58.3%); the difference was significant ($p=0.025$). Among the many factors leading to depression, there were significant differences in poor socio-economic status ($p=0.011$), illiteracy ($p=0.003$) and hostile in-laws ($p=0.016$), all of which were mainly due to females of rural area rather than urban females.

Conclusion: Rural females suffered significantly greater depression compared to their urban counterparts related to poor socio-economic status, illiteracy, and hostile in-laws.

Keywords: Depression; Anxiety; Stress; Female; Marriage; Domestic Violence.

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INTRODUCTION

According to WHO, "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 Depression is a serious condition that has an impact on every aspect of life. Reportedly, one in eight female can suffer from depression at some point throughout her life.² Depression is the leading cause behind illness for females both in high-income and low-middle financial gain countries.

Women are more prone to depression than men. A few causes leading to depression in females of Pakistan include marriage and related issues, pregnancy related issues, enduring discrimination, poor social conditions, poor social support, stressful life events, illiteracy, domestic violence, hostile in-laws and lack of an intimate and confiding relationship with the husband.³ Depression could be of many types: Major depression, Persistent depressive disorder, Bipolar disorder, Seasonal affective disorder, Psychotic depression, Postpartum depression, Premenstrual Dysphoric Disorder, Situational depression, Atypical depression.⁴

Globally 480 million people are estimated to be suffering from depression.⁵ For depression disorders, women account for 41.9% cases as compared to 29.3% among men.⁶ The prevalence of major depression is higher in women than in men; in 2010 its global annual prevalence was 5.5% and 3.2%, respectively, representing a 1.7-fold greater incidence in women.⁷ In Pakistan the frequency of depression is higher among females compared to males. According to previous studies, the prevalence of anxiety and depression among women ranges from 30-66%.⁸

Studies conducted in Pakistan have revealed a high prevalence of anxiety and depression on the whole with more than double the prevalence in women, and a higher prevalence in rural compared to urban areas. A survey carried out in Pakistan showed the percentage of women suffering from depression, where 46% of women were affected in north Pakistan, 66% in rural Punjab, 25% in urban Punjab, 57.5% in urban Karachi and lastly 42.2% in semi-urban Karachi.⁹

Depression varies from person to person and from region to region. This study is based upon a part of the country i.e. Peshawar where women are neglected and their rights are overlooked, more so in the rural areas. As a pilot study, it will highlight the issues that lead to depression in females, so that some of the causes can be addressed through future interventional strategies.

The present study was conducted to compare the status of depression among rural and urban females presenting at two selected teaching hospitals of Peshawar, Khyber Pakhtunkhwa, Pakistan, as well as to determine the provoking factors leading to depression among women selected from the rural and urban areas.

MATERIALS & METHODS

A cross-sectional comparative study was conducted from March to May 2017 at Rehman Medical Institute (RMI), Peshawar, an urban teaching hospital and Naseer Teaching Hospital (NTH), Peshawar, a rural hospital, on female patients attending the Outpatients Department using convenience sampling technique. Criteria for inclusion were women from rural and urban areas, willing to participate after informed consent, without any chronic illness, and being Pakistani nationals. Exclusion criteria were women hesitant in providing information or having a language barrier that prevented proper filling out of the questionnaire.

The sample size was calculated by the WHO formula keeping a population prevalence (p) of depression at 68%, α error at 0.05, and β error at 0.1; the calculated sample size was 84. Data were collected from 93 females on a structured Performa i.e. the

standardized Beck Depression Inventory (BDI) that classifies persons into levels of depression based on scores achieved as: These ups and downs are considered normal (scores 1-10); Mild mood disturbance (scores 11-16); Borderline clinical depression (scores 17-20); Moderate depression (scores 21-30); Severe depression (scores 31-40); and Extreme depression (scores over 40).

Verbal and written informed consent was taken from the hospital and the participants. The questionnaire was handed over to the subject provided she was educated. If illiterate, the team member explained it to the subject and assisted them in filling the questionnaire. Data were entered into SPSS version 20; descriptive statistics were calculated, and comparisons done using the Chi Square Test and Student’s T Test as applicable, keeping $p \leq 0.05$ as significant.

RESULTS

Of the 93 female patients initially selected by convenience sampling, 4 did not mention the area (rural/urban) and were excluded. Of 89 females finally selected, 36(40.45%) were rural and 53(59.55%) were urban. Their ages ranged from 17 to 70 years.

Figure 1 compares the status of depression among rural and urban females; there were 38/53(71.7%) urban females in the normal, mild or borderline clinically depressed categories, compared to 15/36 (41.7%) rural females, more of whom were in moderate, severe and extremely depressed categories (21/36, 58.3%) compared to their urban counterparts (13/53, 24.5%).

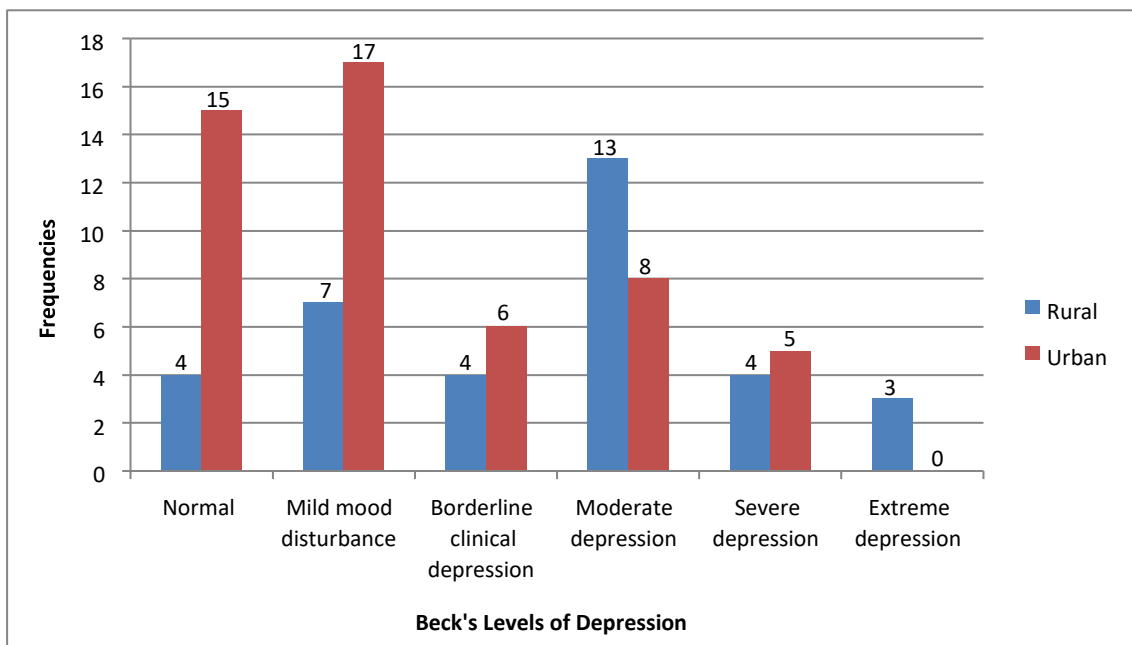


Figure 1: Comparison of the depression status of rural and urban females (n=89).

Table 1 shows the status of depression and provoking factors based on urban or rural area of residence.

Among the many factors leading to depression, there was significant difference in poor socioeconomic status ($p=0.011$),

illiteracy ($p=0.003$) and hostile in-laws ($p=0.016$). The difference was significant mainly in rural area along with the status of depression, indicating that females from rural area were more depressed than urban females ($p=0.025$).

Regarding the depression categories, there were 11 rural females in the normal and mild categories compared to 32 urban females in these categories; the borderline categories had 04 and 06 females respectively, the moderate category had 13 rural and 08 urban females, the severe category had 05 each, while the

extreme category had 03 rural females and no urban females; thus the differences in frequency distributions of the moderate and extreme categories accounted for the significant differences between the rural and urban females in depression categories.

Table 1: Comparison of provoking factors for depression in rural and urban areas (n=89).

#	Variables	Rural (n=36)	Urban (n=53)	Total (n=89)	P value
1.	Marriage related issues				0.390
	Yes	08	08	16	
	No	28	45	73	
2.	Poor socio-economic status				0.011
	Yes	12	06	18	
	No	24	47	71	
3.	Pregnancy				0.842
	Yes	06	08	14	
	No	30	45	75	
4.	Stress				0.236
	Yes	16	17	33	
	No	20	36	56	
5.	Illiteracy				0.003
	Yes	09	02	11	
	No	27	51	78	
6.	Hostile in-laws				0.016
	Yes	07	02	09	
	No	29	51	80	
7.	Domestic violence				0.219
	Yes	01	05	06	
	No	35	48	83	
8.	Depression categories				0.025
	Normal	04	15	19	
	Mild	07	17	24	
	Borderline	04	06	10	
	Moderate	13	08	21	
	Severe	05	05	10	
	Extreme	03	0	03	

DISCUSSION

The aim of this study was to compare the spectrum of depression in females of rural and urban areas and its predisposing factors leading to it. The result of this study is in line with previous studies stating that rural females were more depressed compared to their urban counterparts.^{9,10} The depression in rural females (58.3%) was significantly higher than their urban counterparts (24.5%).

This study shows that the most significant provoking factor for depression in rural compared to urban women was illiteracy ($p=0.003$) followed by poor socio-economic status ($p=0.011$) and hostile in-laws ($p=0.016$); this result is supported in other studies.¹¹

Depression is higher in rural females compared to their urban counterparts this could be due to urban females being more educated and have good socio-economic status as comparatively many of them are working which benefits them financially and keeps them occupied. Whereas females in rural areas are mainly dependent on their husbands financially and therefore it affects them in different ways, depression being one of them. Rural females significantly endure more domestic violence, discrimination, hostile in-laws etc. compared to urban females.

This could be because of illiteracy, poverty and that they cannot speak up for themselves and hence end up being mentally disturbed. Rural females struggle with combined effects of poverty disease and social isolation as many of their men folk are employed away from home.¹¹ Marriage related issues, stress and pregnancy were other non-significant factors that could lead to a higher depression in rural areas.

Depression is not simply a result of a single factor rather it is a complex disease resulting from a mix of both genetic and environmental factors, thus there could be other differences than what this study shows as genetic factors were not included in this study. There is a need for further studies which should highlight the role of genetic factors and religion contributing to depression and difference in the two selected populations.

LIMITATIONS

Being a preliminary hospital-based study, the small sample size does not allow generalization.

CONCLUSION

Rural females suffered significantly greater depression compared to their urban counterparts related to poor socio-economic status, illiteracy, and hostile in-laws.

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