

PREVALENCE OF DEPRESSION AMONG WOMEN OF REPRODUCTIVE AGE & ITS ASSOCIATION WITH DIFFERENT AGE GROUP & MARITAL STATUS

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ABSTRACT

Objective: This study will aim to know the prevalence of depression among women of reproductive age and will associate it with different age groups and marital status.

Materials & Methods: A Cross-sectional observational study was conducted at General OPD of Khyber Teaching Hospital, Peshawar, between January to July 2017 over a sample of 200 women. Women aged between 15-49 years, well oriented were included in the study while females with any mental retardation or any other chronic diseases were excluded from the study. A pre-designed questionnaire was used for data collection after receiving informed consent. Beck depression inventory (BDI) tool was used to categorize depression in standard, mild, moderate and severe forms. SPSS v.25.0 was used for data analysis; categorical variables were presented in frequencies and percentages. Numerical variable results were presented as mean and standard deviation. Chi-square and Odds Ratio was calculated through cross-tabulation and p-value ≤ 0.05 was taken significantly.

Results: Sample of 200 women with a mean age of 30.99 ± 8.9 was studied for prevalence of depression among reproductive age group. An overall prevalence of 70.5% was recorded among which married women had 61% followed by unmarried with 25%, then divorced with 7.5% and widow with 6.5%. Among age groups majority of cases were reported in 36-49 years with 40% followed by 15-25 years group and 26-35 years group with 30.5% and 29.5%, respectively. A high association of severe depression was shown for married old aged women, while divorced middle-aged women were found associated with moderate to mild depression. Unmarried and widow group was found to be associated with no depression at all.

Conclusion: It can be concluded that 70.5% of women presented in the reproductive age group had depression, which is more prevalent among married old aged women.

Keywords: Depression, Age Groups, Marital Status, Reproductive age

INTRODUCTION

Depression is among prevalent diseases internationally and recorded to cause morbidities among

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150 million people globally¹. Women experience a higher prevalence of disorders related mental distress, which is highest in reproductive age². Data from different epidemiological studies of diverse cultures have shown prevalence as twice high in women as compared to men^{3&4}. As per World Health Organization (WHO) Global Burden of Disease 1996 stats, unipolar depression is considered as most

significant factor of disease among women in 20th century, with annual prevalence showing 1% to 6% and more prevalent among younger cohort⁵⁻⁷. WHO has, therefore, put particular emphasis on needs of research in relation to gender-specific factors particularly those affecting daily life⁸.

The female gender of our region that is South Asia may face many conditions, which may lead to poor mental health, antenatal depression among the women of reproductive age group was found to 16-33%⁹. Problems faced by women in husband home-like violence by husband, lack of in law's support, preference for male child, and pregnancy are sideways important factors of depression in this society¹⁰. Pakistan has high male to female ratio that is 1.8:1 of 140 M as per 1998 census¹¹. Women constitute 48% of the total population in the country of which 22% are of lies within reproductive age group, 24% of them has low literacy rate and are housewives being dependent on their male partner. The psychological stresses of women in our country have prevalence in all age groups from childhood to old age. Different studies have shown consistent results of high rate of mental illness particularly depression in our country^{12&13}. Indeed problems especially social one are among significant causes or risk factors of such mental illness and has shown an overall prevalence of 34%, this disease is among major contributor towards disability as recorded in DALYs (Disability-adjusted life years) and its costs are affecting families a lot in a country with health budget of less than 1%, with much less allocated to mental health^{14&15}.

Depression in different stages of reproductive life induces its effect to alter the normal living of the women and also life associated with it, whether it is in the form of prenatal effects, antenatal effects, or postnatal effects, which further leads to morbidities among women and child of such depressive women. The study is meant to know the prevalence of depression among reproductive age group females; many studies are being done on this topic; however, association studies are rarely found from our society. The study will help Medical, Gynecological, Psychological, Public Health, and other expert staff to know the vulnerable age along with marital status having maximum depressive illness. The study's objective is to know the depression prevalence among females of reproductive age group and find its association with

different age group and marital status.

MATERIALS AND METHODS

This cross-sectional observational study was conducted at General Outpatient Department of Khyber Teaching Hospital, Peshawar, after taking approval from January 2017 to July 2017. A total 200 patients were selected as per nonprobability convenient sampling. Women aged between 15-49 years, well oriented were included in the study while any female with any mental retardation or any other chronic disease were excluded from the study. A pre-designed questionnaire was used to get demographic data after receiving informed consent from study participants. Beck depression inventory (BDI) was a tool for categorization of depression in following categories¹⁶:

Normal	0-9 Score
Mild	10-16 Score
Moderate	17-29 Score
Severe	30 & onward Score

Depression was taken as the dependent variable, while all others were independent variables. SPSS v.25.0 was used; categorical variables were presented in frequencies and percentages. Numerical variables results were shown as mean and standard deviation. Chi-square and Odds Ratio was calculated vide cross-tabulation and p-value ≤ 0.05 was taken significantly.

RESULTS

Samples of 200 patients with a mean age of 30.99 ± 8.9 years were studied for prevalence and association. Among 200 patients 59 (29.5%) were normal, 76 (38.0%) had mild depression, 46 (23%) with moderate depression and 19 (9.5%) had severe depression with overall prevalence of 141 (70.5%). While the majority of them were married with 122 (61%) followed by unmarried 50 (25%), 13 (6.5%) widow, and 15 (7.5%) divorced. Many of the patients were from 36-49 years age group, i.e. 40% followed by 29.5% were 26-35 years, and 30.5% were 15-25 years. The stratification of depression with age group and marital status is given in Table 1 & 2.

The association of depression with age group suggesting highest odds of 1.466 for moderate depression in age group of 15-25 years, highest

Table 1: Stratification of Depression Age group-wise.

Depression	Age Group (years) n=200		
	15-25	26-35	36-49
Normal	15 (25.4)	17 (28.8)	27 (45.8)
Mild	24 (31.6)	24 (31.6)	28 (36.8)
Moderate	17 (37)	14 (30.4)	15 (32.6)
Severe	5 (26.3)	4 (21.1)	10 (52.6)

*values are given as n (%)

Table 2: Stratification of Depression Marital status wise. (n=200)

Depression	Marital Status n=200			
	Married	Unmarried	Widow	Divorced
Normal	33 (55.9)	18 (30.5)	5 (8.5)	3 (5.1)
Mild	45 (59.2)	17 (22.4)	4 (5.3%)	10 (13.2)
Moderate	29 (63)	13 (28.3)	3 (6.5)	1 (2.2)
Severe	15 (78.9)	2 (10.5)	1 (5.3)	1 (5.3)

*values are given as n (%)

Table 3: Association of Depression with Age group and Marital Status. (n=200)

A G E GROUP (Years)	DEPRESSION											
	Normal			Mild			Moderate			Severe		
	X2	Sign*	OR	X2	Sign*	OR	X2	Sign*	OR	X2	Sign*	OR
15-25	1.017	.313	.704	.067	.795	1.085	1.175	.278	1.466	.173	.677	.797
26-35	.019	.890	.954	.255	.614	1.174	.025	.874	1.060	.720	.396	.611
36-49	1.158	.282	1.401	.509	.475	.808	1.360	.244	.663	1.396	.237	1.762
Married	1.096	.295	.719	.049	.825	.936	.060	.806	1.089	2.699	.100	2.535
Unmarried	1.354	.245	1.495	.453	.501	.795	.339	.561	1.246	2.346	.126	.326
Widow	.537	.464	1.539	.309	.579	.710	.000	.995	1.005	.053	.818	.782
Divorced	.704	.402	.576	5.656	.017	3.606	2.443	.118	.222	.151	.697	.663

*Chi-square applied.

OR=1.060 for moderate depression in age group 26-35 years while highest OR=1.762 for severe depression in age group of 36-49 years. Association of depression was also made with marital status giving results of highest odd of 2.535 for severe depression in married group, highest OR 1.495 for being regular in unmarried group, highest OR 1.539 for again being normal in widow group and highest odd of 3.606 for mild depression in divorced group, full data based on Table 3.

DISCUSSION

Depression is a world-known cause of morbidity, the prevalence of depression in this study is 70.5%, the results of which are inconsistent with another

study conducted at Karachi¹⁷ for subjects living in a society, while our study results contradict another study conducted at Lahore peri-urban area^{17&18}. In the world particularly in United States of America the prevalence remains to be between 10-25% with average of 20%¹⁹. The prevalence, however, varies mostly at different stages of reproductive life; for example, a Canada based study²⁰ has reported antenatal depression of 27% while almost same percentage was reported at Lahore^{20,21}. Similarly post-partum depression has its figures internationally and nationally^{19,22}.

The study shows as the age increases in reproductive females, chances of depression also gets increased with severity too. This study shows that 53

out of 80 patients of age between 36-49 years were suffering from depressive disorders with a percentage of 66.25% as given in table 1, which is in similarity with a study conducted at Karachi¹⁷. The same sort of figures are being recorded in various international studies; one of them was conducted in South Africa, clearly showing an increase in depressive disorders with age^{23&24}. This increase in depression with age can be alarming for the health of patients, which needs proper attention.

This study showed that many presenting to the OPD were married, and there was quite a high ratio of depression in married females, with 89 out of 122 married subjects were having depression with a percentage of 72.96, making almost three out four females depressive as given in table 2. These results coincide with a study conducted at Lahore in which almost 66% of patients were married¹⁸. The results of divorced females were also expected one in which four out five females were suffering from this morbid disease with a percentage of 80, the results of which are in similarity with the study conducted by Tabassum F, et al. in Karachi having 83.3% divorced subjects suffering from this disease¹⁷.

The study also calculated the association of different age groups and marital status with depression, for which not enough literature can be searched, however in this study, severity of depression is related with increase of age having OR 1.762 at an age between 36-49 as given table 3. Married patients had higher odds for severe depression while divorced patients having high frequency of depression has higher odds for mild depression. Unmarried and widow patient shows higher odds for no depression. The results of which clearly show that age is major determinant in depression diagnosis with same case in widow and married patients having higher odds and high frequency.

CONCLUSION

This unique study will help concerned Medical, Gynecological, Public Health, and other experts to understand the prevalence of depression in reproductive age group and associate it with different age groups and marital status. The conclusion can be drawn that depression found to be major morbidity among women visiting general outpatient department with a vast number of $\frac{3}{4}$ suffering from depression. The study also showed that old aged married women

are more prone to depression.

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