

FREQUENCY AND SOCIO-DEMOGRAPHIC DETERMINANTS OF DEPRESSION AMONG ADULT WOMEN

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ABSTRACT

Objective: To determine the frequency and socio demographic determinants of depression among adult women.

Materials and Methods: Cross sectional study through purposive sampling was conducted after approval from institutional review board from April 2018 to September 2018 on calculated sample size of n=132 adult women, aged 18 -60 years from Public and private sector hospital and residents of steel town, Karachi, Pakistan. Sample size was calculated by open ended software. Questionnaire consists of demographic variables information and Beck Depression Inventory Scale (BDI). Cut-off scores for BDI are: 0–9, indicates minimal, 10–18: mild 19–29: moderate and 30-63 for severe depression. SPSS Version 20. Mean, standard deviation, frequency, percentage, Chi square test and multiple logistic regressions were applied for statistical analysis.

Result: Mean age was 33±10.66. Mild depression was (22.7%), moderate(15.9%), and severe depression was (5.3%), Normal or exhibited with some up and down mood disorders were (56.1) %. Significant association of depression was noted with education, domestic abuse, duration of domestic work and domestic workload, and sleep/ rest hours.

Conclusion: Higher frequency of depression seen among Pakistani women especially where several socio demographic risk factors are involved. Multiple roles and responsibilities make them more pressurized and frustrated.

Keywords: Frequency, depression, socio-demographic determinants, adult women, Beck Depression Inventory(BDI).

This article may be cited as: Mirza N, Sheikh SI, Rahim M, Ali A, Khan NS, Bibi Z. Frequency and socio-demographic determinants of Depression among adult women. *J Med Sci* 2020 Jan;28(1):10-15

INTRODUCTION

Depression is the major cause of the disease burden and the primary reason of morbidity.¹ The lifetime existence of depression ranges from 20% to 25% in females and 7% to 12% in males.² Risk factors for many common mental disorders are greatly associated with social disparities, whereby the greater the inequality the higher the risk. The poor and needy undergo disproportionately, but those in the middle of the social gradient are involved as well.³ Depression is much more common among women than men, with female/male risk ratios roughly 2:1.⁴ It is

an affective disorder, characterized by low mood, reduced energy and aversion to usual activities of interest.⁵

It is closely related with change in appetite, sleep, problem in concentration, making decisions, aches and pains and constipation or suicidal tendency.⁶ Greater prevalence of depression is associated with hormonal changes in women during different stages of their life such as adolescence, pregnancy and menopause.⁷ Depression has been predicted to be the leading cause of disease burden in 2030 by the World Health Organization (WHO).⁸

In Pakistan the prevalence of anxiety and depression among women ranges from 30-66 %.⁹ World Health Organization's Global Burden of Disease (GBD) estimated that major depression is the leading cause of disease-related disability among women in the world today (Murray and Lopez, 1996). The Purpose of the current study is to detect socio demographic risk factors and frequency of depression among adult women of Karachi, Pakistan.

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Date Received: October, 23, 2019

Date Revised: December, 29, 2019

Date Accepted: January, 20, 2020

MATERIAL AND METHODS

Current cross sectional study through purposive sampling was conducted during April 2018 to September 2018 among adult women. Sample size was calculated by open epi, one sample continuous outcome taking mean and SD of depression 22.47 ± 12.34 and 95% confidence level = 1.96 and 5% margin of error. The calculated sample size was 24, which has been raised to 132.¹⁰

Ethical approval was obtained from the Institution Review board. Informed consent was also taken from the participants. Data was collected from home surveys and public and private sector hospital of steel town, Karachi. BDI Scale was administered on a sample of $n=132$ women $n=71$ employed and $n=61$ unemployed women aged 18 -60 years up to the age of retirement.

Questionnaire consists of demographic variables to meet the study objectives and Beck Depression Inventory Scale (BDI) to measure depression. Information on age, marital status, domestic work, education, household utilities, employment status was obtained. BDI consists of 21-item, self-report rating inventory that measures characteristic attitudes and symptoms of depression (Beck, et al., 1961). Internal consistency for the BDI ranges from .73 to .92 with a mean of .86. (Beck, Steer, &Garbing, 1988). Questionnaire was translated in native language for the participant's convenience. The BDI takes approximately 10-15 minutes to complete. Standard cut-off scores for BDI are: 0–9: indicates minimal depression, 10–18: indicates mild depression. 19–29: indicates moderate depression and 30 to 63 for severe depression.¹¹

SPSS Version 20. Mean, standard deviation, frequency and percentage were used for descriptive analysis. Chi square test (independent test) and multiple logistic regressions used to determine the relationship between demographic variables and depression symptoms in the

participants. Statistical significance was less than 1.00.

RESULTS

Presents the frequency of socio demographic determinants among adult women. Mean age of women was 33 ± 10.66 . Mild (22.7%), moderate (15.9%), and severe depression was (5.3%), Normal or exhibited with some up and down mood disorders were (56.1)%. Table 2. Presents the association of depression with related factors. Significant association was found among education, domestic work load and duration domestic work domestic abuse, sleep/rest hours. Table 3: The Univariate logistic Regression model for predicting the depression among adult women

The Univariate logistic Regression Analysis was used to predict the depression among adult women. In marital status, single women showed 1.35 times more depression as compared to married women {OR=1.351, CI=(0.678-2.691)p=0.393}. Comparison of education, Primary (OR=2.894, C.I=(1.151-7.280)p=0.024) and secondary level of educated women (OR=1.312, C.I=(0.338-4.442)p=0.662) seem to be more depressed than highly educated women. Empowered women such as, women who drive a cars showed more depression (OR=2.298, C.I=(0.915-5.770)P=0.077) than who are not driving. Women who have own home are also seemed to be more stressed (OR=1.955, C.I=(0.924-4.133)p=0.079) than who are living in rental house. Female who having affected family relationship with husband and in laws revealed more depression (OR=2.652, C.I=(0.917-7.671)P=0.072} than females living with good family relationship. Sleep and rest hours increases (OR=0.841, C.I=(0.749-0.94) P=0.003) symptom of depression was decreases in women.

Table 1: Frequency of socio demographic determinants among adult women (n=132)

Socio demographic determinants	Women	
Factors	Frequency	Percentage
Age	33 ± 10.66	
Marital status		
Single	65	49.2
Married	67	50.8
Education		
Primary	82	62.1
Secondary	21	15.9
Higher Secondary	29	22.0
Income	$37,170.73 \pm 15,724.03$	
Do you drive car		
Yes	23	17.4
No	109	82.6

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Home		
Own	87	65.9
Rent	45	34.1
Domestic work		
Maid	52	39.4
Non Maid	80	60.6
Duration of domestic work	4.38±4.1	
Psychiatric history		
Yes	7	5.3
No	125	94.7
Family relationship		
Satisfied	115	87.1
Not satisfied	17	12.9
Sole breadwinner		
Yes	21	15.9
No	111	84.1
Domestic abuse		
Yes	9	6.8
No	123	93.2
Addiction		
Yes	3	2.3
No	129	97.7
How much time you get rest & sleep	8.42±3.62	
BDI		
None	74	56.1
Mild Depression	30	22.7
Moderate Depression	21	15.9
Severe Depression	7	5.3

Table 2: Association of different factor with the levels of BDI n=132

Factors	DEPRESSION				P-value
	No (n=74)		Yes (n=58)		
	Frequency	Percentage	Frequency	Percentage	
Age	34.39±11.48		31.24±9.31		0.092
Marital status					0.392
Single	34	52.3%	31	47.7%	
Married	40	59.7%	27	40.3%	
Education					0.039
Primary	39	47.6%	43	52.4%	
Secondary	14	66.7%	7	33.3%	
Higher Secondary	21	72.4%	8	27.6%	
Do you drive car					0.072
Yes	9	39.1%	14	60.9%	
No	65	59.6%	44	40.4%	
Home					0.077
Own	44	50.6%	43	49.4%	
Rent	30	66.7%	15	33.3%	

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Domestic work					0.003
Maid	21	40.4%	31	59.6%	
Non Maid	53	66.2%	27	33.8%	
Duration of domestic work	5.66±4.81		2.67±2.21		<0.001
Psychiatric history					0.132
Yes	2	28.6%	5	71.4%	
No	72	57.6%	53	42.4%	
Family relationship					0.286
Satisfied	68	59.1%	47	40.9%	
Not satisfied	6	35.3%	11	64.7%	
Physical activity	3.31±2.68		2.44±2.67		0.069
Sole breadwinner					0.286
Yes	14	66.7%	7	33.3%	
No	60	54.1%	51	45.9%	
Domestic abuse					0.005
Yes	1	11.1%	8	88.9%	
No	73	59.3%	50	40.7%	
Addiction					0.422
Yes	1	33.3%	2	66.7%	
No	73	56.6%	56	43.4%	
How much time you get rest & sleep	9.29±3.79		7.32±3.07		0.002
Depression yes (0-9), No (>10)					

Table 3: Univariate and multivariable analysis of depression among women

Determinants	OR	95% CI for OR	P-value	AOR	95% CI for AOR	P-value
Age (years)	0.971	(0.939-1.005)	0.094	0.996	(0.957-1.037)	0.853
Married (Single)	1.351	(0.678-2.691)	0.393	-	-	-
Education (Secondary)	1.312	(0.338-4.442)	0.662	-	-	-
Education (Primary)	2.894	(1.151-7.280)	0.024	-	-	-
Drive a car (yes)	2.298	(0.915-5.770)	0.077	1.428	(0.510-4.003)	0.498
Home (own)	1.955	(0.924-4.133)	0.079	1.702	(0.653-4.438)	0.277
Maid (Yes)	2.898	(1.407-5.966)	0.004	2.053	(0.784-5.377)	0.143
Domestic Work (< 4 hours)	3.345	(1.612-6.942)	0.001	1.591	(0.639-3.960)	0.318
Psychiatric history (Yes)	3.396	(0.634-18.18)	0.153	-	-	-
Family relationship (Not satisfied)	2.652	(0.917-7.671)	0.072	1.978	(0.581-6.735)	0.275
Domestic abuse (Yes)	11.68	(1.416-96.31)	0.022	18.304	(1.944-172.37)	0.011
Addiction (Yes)	2.607	(0.231-29.48)	0.439	-	-	-
Rest & sleep (hours)	0.841	(0.749-0.94)	0.003	0.912	(0.792-1.051)	0.203
For univariate p-value consider <0.1significance						

COR = Crude Odds Ratio

CI = Confidence Intervals at 95%

P-value = taken Significant at 0.1

MULTIVARIABLE ANALYSIS

The odds of depressed was less {AOR=0.996, C.I= (0.957-1.037) P=0.853} when women age increase, domestic abused women remained statistically significant effect at multivariable regression phase. Attribute drive a car, having own home, doing job work, not satisfied with family relationship, addicted and (rest & sleep) hours were not associated with depressed symptom among women after adjusting the others covariates.

DISCUSSION

Current study discovered the frequency and determinants of depression among adult women. A greater frequency of depression shown among women who face severe stressful circumstance, pressures and issues. The study results revealed that single women were much more depressed than married women. The profession or working conditions are not the solitary issue but there are other issues and socio demographic risk factors which play significant role. Close relationship is seen between age, education, marital status occupation, rest hours, domestic abuse domestic helper, family relationship, domestic work load. However it is known that educated employed women can be able to manage their families, pressure and melancholy in a better way than housewives.

Women faced more pressures in our social and cultural set up. This higher frequency of depression in females may be due to the added responsibility of the role of caretaker of the whole family (Tareen, 2000)

According to data from Eurostat (extracted in January 2017), in 2014 at EU-28 level 3.5 % of the population in Bulgaria reported having chronic depression.¹²

Current investigation supported by previous research evidence conducted by Freudenberg (1992) who revealed that women with combined role experienced more stressful. Munaf and Ali (1999) reported that although Pakistani women do accomplish their two fold duties, however they face troubles to come out from their tensions. Female sex itself is a risk factor of depression. (Danesh, 2007; Norozi, 2006; Genaabadi, 2010; Rahmani, 2007),

Matching results for depression among women. Husain and colleagues revealed that the frequency of depressive illness was 44%, out of which 25.5% were males as compared to 57.5% females. In general, low education level, multi gravidity, chronic health problems, accommodation worries and economic problems were significantly associated with depression.¹³⁻¹⁴

Contrary to Soomro et al findings that housewives were much more depressed as compared to working women, (14) Sanlier demonstrated that total stress score of working women is higher as compared to non-working women. This is again in line with our results. Sanlier and

colleagues results suggest that increased stress was associated with working status of Turkish women.¹⁵

Current discussion can help to hypothesized that women develop more depression resulting from family conflicts. Women are more likely to experience work overload and conflicts (13). A study conducted in India revealed that major depression was present in 2.9% working and 2.3% in housewives respectively.¹⁶

Freedheim and colleagues investigated that females with combined responsibilities experience additional stress.¹⁷ Bardwick argue that multiple roles and the exertion to overcome overall responsibilities of house, parenthood, and work seem more likely to put the females under pressure.¹⁸ A indigenous study reported that although Pakistani working women do justify their multiple performance however strive to manage their pressures.¹⁹

STUDY LIMITATIONS

Study can be generalizable to a representative population only

CONCLUSION

A higher frequency of depressive symptoms among women, especially where several socio demographic risk factors are involved was seen, which make them more pressurized, isolated and miserable.

RECOMMENDATIONS

To develop strategies for early identification, management counselling and availability of stress management therapy at work place at community and government level. Similar study can be conducted in diverse locations of societies and other institutions. Comprehensive screening tools for diagnosing depression might facilitate its early detection.

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CONFLICT OF INTEREST: Authors declare no conflict of interest

GRANT SUPPORT AND FINANCIAL DISCLOSURE: NIL

AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

Mirza N: Idea and write up manuscript and final approval of article

Sheikh SI: Review of literature

Rahim M: Proof Reading,

Ali A: Result writing and statistic analysis,

Khan NUS: Introduction writing,

Bibi Z: Method writing.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.