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Analysis of Depression Rates among Working and Non-Working Women in Karachi

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Abstract

Background: Women frequently navigate the dual responsibilities of home and work. Although their participation in the workforce is on the rise, their domestic obligations have not diminished. This balancing act can create unavoidable work-family conflicts, often leading to job dissatisfaction and heightened stress. Nevertheless, employment can serve as a beneficial outlet, offering women a way to relieve some of the burdens associated with their household duties.

Objective: We aim to compare the quality of life and depression/anxiety of a working woman vs a stay-at-home woman in Karachi.

Methods: Place and duration of study: A cross-sectional study was conducted among 200 women aged 20-50 years irrespective of their occupation, marital status, and number of children in Karachi to determine the prevalence of depression in working vs non-working individuals using PHQ-9 and HAD scales and quality of life was assessed. An Independent t-test was computed to see the association of depression among working vs non-working women.

Results: The mean age of the participants was 33.2+7.7 years. The mean HAD depression score in working women was 14.8+7.9 and in non-working women was 15.3+8.7 showing depression was more common in stay-at-home women.

Conclusion: Depression tends to be more prevalent among women who are not a part of the workforce. The findings hint that the blues tend to visit non-working women more often, painting a clearer picture of the challenges they might face in day to day lives of Pakistani women.

Keywords: Depression, working women, social support, anxiety, Pakistani women.

1. INTRODUCTION

More than 20 million Pakistanis are affected by mental illnesses. The fact that Pakistan has one of the lowest psychiatrist-to-person ratios in the world highlights the seriousness of this predicament [1]. Depression is a crippling condition that affects people all over the world. It is characterized by altered mood, including loss of interest and pleasure, as well as diminished cognitive and vegetative functioning, including disordered sleep and eating for at least two weeks for a person to be considered depressed. One in six individuals will encounter major depressive disorder (MDD) at some stage in their lives, and women are affected almost twice as often as men [2]. The female population is particularly susceptible to various types of depression, such as premenstrual syndrome (PMS), postpartum depression, and postmenopausal depression. This suggests that fluctuations in ovarian hormones may contribute to the differences in prevalence between genders [3]. While some studies have revealed that depressed individuals have lower levels of serotonin and norepinephrine, evidence also points to the possibility that deficiencies in monoamine function play a role in depression [4]. Women who experience more chronic stress are more likely to experience depressive episodes, especially following an acute stress event [5]. Relationships with others can be viewed as a significant source of stress and depression risk in women, as depressed women frequently live in complex interpersonal environments with issues including divorce and marital troubles or difficulties with children [6]. Cultural expectations surrounding female roles are undoubtedly significant factors contributing to depression in women, alongside a lack of emotional and social support [7]. To fulfill their basic need for love and respect, many women

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choose to work. Employment can enhance self-esteem, as women gain affirmation from their achievements. Consequently, working women often experience better mental health compared to homemakers [8]. Research has indicated that employed women tend to have better psychological well-being than their non-working counterparts, with studies suggesting that employed mothers also enjoy greater psychological health [9]. However, some studies, such as those by Silva (2010) and Alavi (2010), found no significant differences in psychological well-being between working and non-working women. The impact of employment on women's well-being remains inconclusive and is influenced by various factors, including working conditions, the type of organization, individual perceptions, and job satisfaction [10, 11].

Despite variations for age [12], race [13], or socioeconomic status [14], the connections between marriage and depression are often strong. Women must put in a lot of effort at work to recognize their worthwhile also balancing the responsibilities of being a decent wife and caring mother in the home [15]. Women play a dual function (at home and at work) in society due to the double effect of the traditional gender notion of "male advocate outside, female advocate inside" and the current societal and family labor division of "men's and women's equality." Women's involvement in the economy is growing, but their contribution to domestic duties is not decreasing in line with this [16]. Family and work disputes are common among working women because of the stark differences between work and home life [17]. The necessity of juggling several responsibilities nearly guarantees work-family conflicts, which frequently cause job dissatisfaction, employment stress, and negative health outcomes [18].

In the sprawling metropolis of Karachi, a tale of two distinct worlds unfolds. By delving deep into the intricacies of these two worlds, this research aims to unveil the underlying factors contributing to depression rates, challenge existing stereotypes, and advocate for more comprehensive mental health support for all women in Karachi. Through this exploration, we hope to foster a deeper understanding of the diverse challenges women face in their daily lives and the resilience they exhibit, paving the way for a more inclusive, empathetic, and supportive society.

2. METHODOLOGY

A longitudinal study was conducted among 200 women aged 20-50 years irrespective of their occupation, marital status and number of children in Karachi (between March 2023 - January 2024) to determine the prevalence of depression in working (100) vs non-working (100) individuals using Patient Health Questionnaire (PHQ-9) and Hospital Anxiety and Depression (HAD) scales. A structured questionnaire was used as a tool to evaluate the prevalence of depression in working vs. non-working women. A part of the questionnaire included PHQ-9 scale for Depression, HAD scale and certain other questions to assess quality of life.

The scoring criteria for the PHQ-9, used to categorize depression severity, are shown in Fig. (**1**).

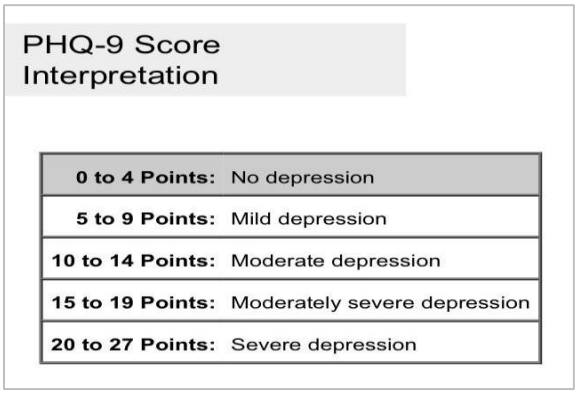

Figure 1: PHQ-9 scoring criteria for depression severity used in the study.

The HADS scale is a questionnaire commonly used by doctors and DTR therapists to assess patient/client levels of Anxiety and Depression. HADS is a valid and reliable self-rating scale that measures anxiety and depression in both hospital and community settings. HADS gives clinically meaningful results as a psychological screening tool and can assess the symptom severity of anxiety and depression disorders in clients with illness and the general population.

Test details

1. HADS – One questionnaire, comprising of fourteen questions
2. The questionnaire features seven questions for anxiety and seven for depression of which can be answered within 2-5 minutes.
3. Responses are scored on a scale of 3 to 0 – The maximum score is therefore 21 for Anxiety and 21 for Depression.
4. Odd numbers: 1, 3, 5, 7, 9, 11 and 13 are Anxiety Questions (Grey in Colour)
5. Even numbers: 2, 4, 6, 8, 10, 12 and 14 are Depression Questions (White in Colour)
6. The two sub-scales, anxiety and depression, have been found to be independent measures. In its current form the HADS is now divided into four stages:

Scores of:

- 0-7 (Normal)
- 8-10 (Mild)
- 11-15 (Moderate)
- 16-21 (Severe)

To estimate sample size, we outlined the statistical methods to be used, established acceptable levels of precision, chose the desired power of the study, specified the confidence level, and identified the effect size, which reflected the magnitude of meaningful differences. The formula for the

required sample size to detect an effect γ with power π is N = σ̃ 2 (zπ + z1−α/2)2/γ2. Participants were selected by consecutive sampling technique. Women with co-morbidities like Diabetes, Hypertension etc. or women suffering from chronic diseases were excluded from the study. Frequencies and percentages were generated for categorical variables while mean and standard deviation was computed for numerical variables. Chi square was computed to see association of working and non-working women with depression. Binary logistic regression was run to see the prevalence of depression in working vs. non-working women in Karachi using 95% confidence interval. P- value <0.05 was considered significant.

3. RESULTS

Mean age of the participants was 33.2+7.7yrs. Mean HAD depression score in working women was 14.8+7.9 and non-working women was 15.3+8.7 showing depression was more common in stay-at-home women. 70% of women feel better after exercising. Table **1** shows the characteristics of working vs stay at home women. Table **2** demonstrates the association of depression scores in working and non-working women and Fig. (**2**) illustrates the work life profile of the subject.

Table 1: Characteristics of working vs stay at home women.

Characteristics of the study population		**Working Women n (%)**	**Non-Working Women n (%)**	**p-value**
Age in yrs X±SD	33.2±7.7			
Marital status	Unmarried	47(83.9)	9(16.1)	0.000
	Married	70(49)	73(51)	
	Separated/divorced	3(75)	1(25)	
Education	illiterate	2(15.4)	11(84.6)	0.000
	Matric/O level	1(11.1)	8(88.9)	
	Intermediate/ A level	9(40.9)	13(59.1)	
	University	108(67.9)	51(32.1)	
Household income in PKR	<50000	19(42.2)	26(57.8)	0.006
	50000-1 lac	32(74.4)	11(25.6)	
	1lac-2 lacs	25(51)	24(49)	
	>2lacs	44(66.7)	22(33.3)	
Family support at home	Present	107(62.2)	65(37.8)	0.029
	Absent	13(41.9)	18(58.1)	
Do you feel valued for your contribution at home	Yes	81(57)	61(43)	0.224
	No	39(63.9)	22(36.1)	
Do you have trouble sleeping at night	Yes	49(58.3)	35(41.7)	0.481
	No	71(59.7)	48(40.3)	
Do you experience crying spells	Never	20(64.5)	11(35.5)	0.664
	Sometimes	87(59.2)	60(40.8)	
	Always	13(52)	12(48)	
Do you prefer staying alone	Never	15(46.9)	17(53.1)	0.114
	Sometimes	85(59)	59(41)	
	Always	20(74.1)	7(25.9)	
Postpartum depression	Yes	24(52.2)	22(47.8)	0.007
	No	46(51.1)	44(48.9)	
Your own perception of your mental health	Poor	33(54.1)	28(45.9)	0.646
	Good	75(62)	46(38)	
	Excellent	11(55)	9(45)	
Your own perception of your physical health	Poor	38(56.7)	29(43.3)	0.821
	Good	71(59.7)	48(40.3)	
	Excellent	11(64.7)	6(35.3)	

Table 2: Association of depression scores in women working and non-working.

	Major Depression according to PHQ score n (%)	Non-depressed according to PHQ score n (%)	Chi Square	p-value	Major Depression HAD score n (%)	Non-depressed according to HAD score n (%)	Chi square	p-value
Working women	39(32.5)	81(67.5)	0.530	0.284	33(27.5)	87(72.5)	0.049	0.474
Stay at home women	23(27.7)	60(72.3)			24(28.9)	59(71.1)		

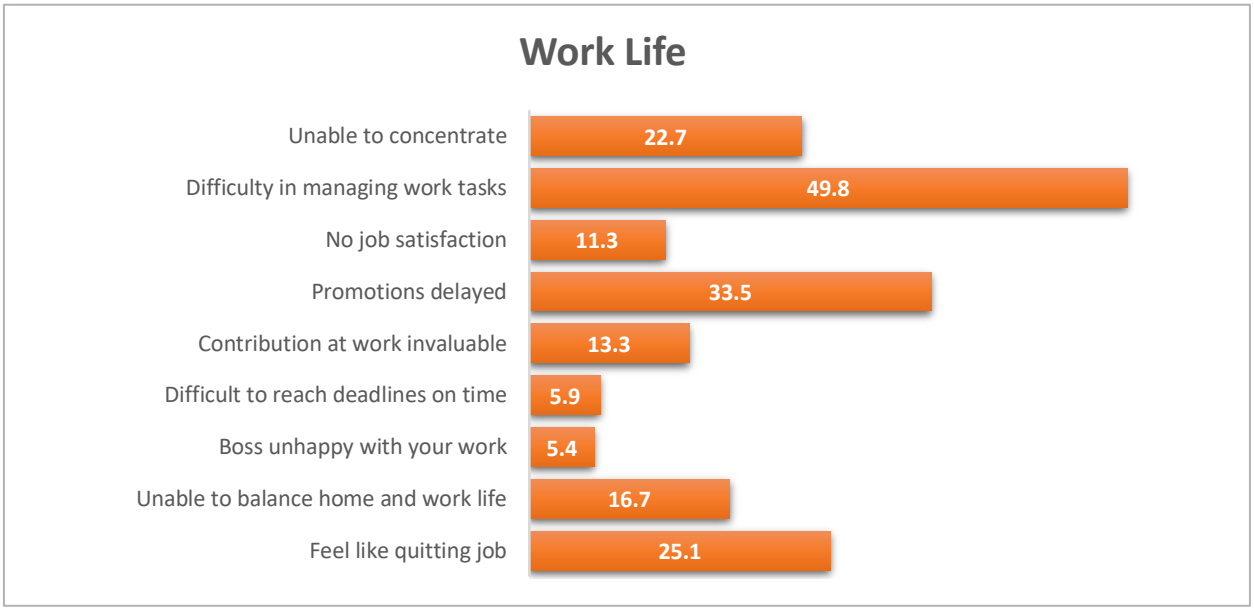

Figure 2: Work life profile.

Working women, on average, are 33.2 years old and predominantly unmarried, with a significant 83.9% being single. They also tend to be more educated, with 67.9% having a university education, and are more likely to belong to higher income households, with 66.7% earning more than 2lacs. While working women report having more family support at home, there are minimal differences between working and non-working women in terms of mental health symptoms and perceptions, with the exception of a slight significance in postpartum depression.

4. DISCUSSION

It is demonstrated in this study conducted in Karachi, women, irrespective of their employment status, grapple with depressive symptoms. The study's findings, which indicate a higher prevalence of depression among women who are not part of the workforce, underscore a broader, often underexplored narrative about the mental health of women in transitional economies like Pakistan.

A key insight from this study is the relationship between employment and mental well-being. Our findings support the results of a related study conducted in India [19], where working women reported better psychological health compared to housewives.

At the heart of our findings is the revelation that non-working women in Karachi experience a higher prevalence of depression than their working counterparts. This aligns with the notion that employment can often serve as a source of empowerment, identity, and purpose. Work provides an arena for women to validate their skills, interact socially, and break free from the confines of domesticity, which can sometimes feel isolating.

Yet, while employment might offer certain protective elements against depression, it's not a one-size-fits-all solution. The very nature of the job, the organizational culture, work-life balance, and levels of job satisfaction play crucial roles. Women in high-demand, low-control job settings face increased risks of depressive disorders. This supports the findings of [20], where the quality of

employment was found to be directly proportional to mental health outcomes.

Contrastingly, the challenges faced by non-working women are manifold. A study pointed towards the significant stressors faced by housewives, encompassing financial dependency, societal pressure, and lack of personal time, hinting at similar sentiments among non-working women in diverse geographies [21].

Family support plays a pivotal role in this dynamic. The Karachi study reveals a correlation between the availability of family support and reduced levels of depression among women. This is echoed by [22], where the presence of emotional and instrumental support from family was associated with better mental health outcomes for women, emphasizing the importance of a robust familial support system in mitigating the risks of depression.

For non-working women, the lack of a defined role outside the home can sometimes exacerbate feelings of confinement, lack of fulfillment, and purposelessness. Interestingly, research from Faisalabad, has indicated that working women reported that their divided attention causes more depression [23].

Furthermore, the associations between marriage, age, socio-economic status, and depression, as evidenced in our study, deserve nuanced exploration. Marriage, often lauded as a protective factor against mental illnesses, might have varying effects based on the quality of marital relationships and the presence or absence of marital conflicts [24].

There are significant differences in the marital status, educational level, household income, and family support at home between working and non-working women in this study. However, in terms of mental health symptoms or perceptions, there aren't significant differences except for postpartum depression.

European studies have often emphasized the importance of job satisfaction in mediating the effects of employment on mental health. For instance, UK-based research highlighted that job satisfaction and feelings of empowerment at the workplace played pivotal roles in shaping women's mental health outcomes. Long working hours are a significant contributor to the development of depression [25].

5. CONCLUSION

Staying out of the workforce is linked with a higher likelihood of experiencing depression among women in our study. While women are making remarkable strides in the workforce, their commitment to home responsibilities remains unwavering. This dual-duty dance sets the stage for a clash between work and family roles, a complex choreography that frequently leads to job discontent and a cloud of stress casting shadows over the minds of working women. However, amidst these challenges, work stands as a valuable investment in a woman's familial duties, offering a unique channel for destressing. Non-working women in Karachi exhibit a higher prevalence of depression compared to their working counterparts. The presence of family support was associated with lower levels of depression. While employment can offer psychological benefits, such as improved self-esteem and reduced feelings of isolation, it is not universally protective. Need for Tailored Mental Health Interventions are required to better support women's mental well-being in diverse socio-cultural contexts.

CONFLICT OF INTEREST

There was no conflict of interest among the authors.

FUNDING

No financial support received for the study.

ETHICAL APPROVAL AND CONSENT TO PARICIPATE

Study was approved by ethical review committee Ziauddin University. ERC Reference code= 5800722RSFM.

Written consent was obtained from all participants. Those who wished to withdraw during the study were permitted to do so.

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None

AUTHOR'S CONTRIBUTION

RS, FJ, MA, MR, RA, and AJ contributed to the conceptualization, benchwork, and manuscript preparation. FJ conducted the statistical analysis. RS, MR, RA, and FJ collaborated on writing and proofreading the manuscript.

REFERENCES

[1] Nisar M, Mohammad RM, Fatima S, Shaikh PR, Rehman M. Perceptions pertaining to clinical depression in Karachi, Pakistan. Cureus. 2019; 11(7): e5094. https://doi.org/10.7759/cureus.5094

[2] Otte C, Gold SM, Penninx BW, Pariante CM, Etkin A, Fava M, *et al*. Major depressive disorder. Nat Rev Dis Primers. 2016; 2: 16065. https://doi.org/10.1038/nrdp.2016.65

[3] Gold SM, Köhler-Forsberg O, Moss-Morris R, Mehnert A, Miranda JJ, Bullinger M, *et al*. Comorbid depression in medical diseases. Nat Rev Dis Primers. 2020; 6(1): 69. https://doi.org/10.1038/s41572-020-0200-2

[4] Zakaria FH, Samhani I, Mustafa MZ, Shafin N. Pathophysiology of depression: stingless bee honey promising as an antidepressant. Molecules. 2022; 27(16): 5091. https://doi.org/10.3390/molecules27165091

[5] Vrshek-Schallhorn S, Ditcheva M, Corneau G. Stress in depression. In: Harkness KL, Hayden EP, Eds.The Oxford handbook of stress and mental health. 2020: pp. 97-126.

[6] Albert KM, Newhouse PA. Estrogen, stress, and depression: cognitive and biological interactions. Annu Rev Clin Psychol. 2019; 15: 399-423. https://doi.org/10.1146/annurev-clinpsy-050718-095557

[7] Patel V. Cultural factors and international epidemiology. Med Anthropol. 2023; 75-87.

[8] Yılmaz E, Uyar E, Yıldız F, Dereboy F. Systematic review and meta-analysis of depressive symptom severity of employed and unemployed women in Turkey. Noro Psikiyatr Ars. 2023; 60(2): 178-84. https://doi.org/10.29399/npa.28170

[9] Zeab F, Ali U. Depression in working and non-working women in pakistan: a comparative study. JSSH. 2018; 57(1): 113-26

[10] Niedhammer I, Coindre K, Memmi S, Bertrais S, Chastang JF. Working conditions and depression in the French national working population: Results from the SUMER study. J Psychiatr Res. 2020;123: 178-86. https://doi.org/10.1016/j.jpsychires.2020.01.003

[11] Gjerdingen D, McGovern P, Bekker M, Lundberg U, Willemsen T. Women's work roles and their impact on health, well-being, and career: comparisons between the United States, Sweden, and The Netherlands. Women Health. 2000; 31(4): 1-20. https://doi.org/10.1300/j013v31n04_01

[12] Anguzu R, Nagavally S, Dawson AZ, Walker RJ, Egede LE. Age and gender differences in trends and impact of depression on quality of life in the United States, 2008 to 2016. Womens Health Issues. 2021;31(4): 353-65. https://doi.org/10.1016/j.whi.2021.02.005

[13] Alang S, McAlpine D, McClain M. Police encounters as stressors: Associations with depression and anxiety across race. Socius. 2021; 7: 1-13. https://doi.org/10.1177/237802312199812

[14] Carlson DL, Kail BL. Socioeconomic variation in the association of marriage with depressive symptoms. Soc Sci Res. 2018; 71: 85-97. https://doi.org/10.1016/j.ssresearch.2017.12.008

[15] Obrenovic B, Jianguo D, Khudaykulov A, Khan MAS. Work-family conflict impact on psychological safety and psychological well-being: a job performance model. Front Psychol. 2020; 11: 475. https://doi.org/10.3389/fpsyg.2020.00475

[16] Hong X, Liu Q, Zhang M. Dual stressors and female pre-school teachers' job satisfaction. during the COVID-19: The mediation of work-family conflict. Front Psychol. 2021; 12: 691498. https://doi.org/10.3389/fpsyg.2021.691498

[17] Kim JY, Jung GH, Kim JH. Work-family conflict and depressive syptoms of married working women in Korea: The role of marriage satisfaction and organizational gender discrimination climate. SAGE Open Nurs. 2023; 9: 1-10. https://doi.org/10.1177/23779608231196841

[18] Zhou S, Da S, Guo H, Zhang X. Work-family conflict and mental health among female employees: a sequential mediation model via negative affect and perceived stress. Front Psychol. 2018; 9: 544. https://doi.org/10.3389/fpsyg.2018.00544

[19] Pignault A, Rastoder M, Houssemand C. The relationship between self-esteem, self-efficacy, and career decision-making difficulties: psychological flourishing as a mediator. Eur J Investig Health Psychol Educ. 2023; 13(9): 1553-68. https://doi.org/10.3390/ejihpe13090113

[20] Niedhammer I, Bertrais S, Witt K. Psychosocial work exposures and health outcomes: a meta-review of 72 literature reviews with meta-analysis. Scand J Work Environ Health. 2021; 47(7): 489-508. https://doi.org/10.5271/sjweh.3968

[21] Sultanpur M. Stress level between housewives and employed women. 2021; 5: 21-4.

[22] Zeab F, Ali U. Depression in working and non-working women in Pakistan: A comparative study. JSSH. 2018; 57(1): 113-26

[23] Rashid T, Mustafa S. To measure the level of depression among working and non-working married women. APMC. 2015; 9(2): 95-9

[24] Gray TD, Hawrilenko M, Cordova JV. Randomized controlled trial of the marriage checkup: depression outcomes. J Marital Fam Ther. 2020; 46(3): 507-22. https://doi.org/10.1111/jmft.12411

[25] Weston G, Zilanawala A, Webb E, Carvalho LA, McMunn A. Long work hours, weekend working and depressive symptoms in men and women: findings from a UK population-based study. J Epidemiol Community Health. 2019; 73(5): 465-74. https://doi.org/10.1136/jech-2018-211309