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SOCIAL DETERMINANTS OF DEPRESSION AMONG REPRODUCTIVE AGE WOMEN RESIDING IN KARACHI, PAKISTAN.

Farhana Tabassum[1]
Dr. Memoona Saeed Lodhi[2]

ABSTRACT

Background: *Depression is mental illness and has become the significant health concern worldwide; this disease is severely ignored by common population because of lack of awareness specifically in developing countries like Pakistan. It is a complex phenomenon and many factors are involved in the development of this problem. Women are more vulnerable for this as compare to the men, in Pakistan the prevalence of anxiety and depression among women ranges from 30-66 %.*

Methods: *Community based cross sectional survey was conducted to identify the prevalence, sociodemographic and economic factors of depression among reproductive age women (15-49) years living in Gulshan-e-Iqbal and IbrahinHydari. Non probability convenient sampling technique was used for the selection of the respondents; self -reporting questionnaire (SRQ-20) was used to measure the depression.*

1 M.Phil. Research Scholar Department of social science, Hamdard University of Karachi.
2 Associate Professor, Hamdard University of Karachi.

Results: *Women in Pakistan are facing high burden of depressive disorders; the prevalence of depression in our sample was 66%. Factors positively associated with depression were personal income, reason of job, life satisfaction, continuous stress in life and quality of life. In multivariate model few indicators showed borderline association such as respondent health problem (OR: 5.2 95% CI; 0.9-30.2), dissatisfaction from the life (OR: 5.2 95% CI; 0.9-30.2) and personal income are key indicator which showing prospective effect.*

Conclusion: *It is concluded that the prevalence of depression in women have higher rates by SRQ. Hence there is an urgent need for increasing number of mental health surveys to see the clear picture on a border spectrum, develop strategies for early identification, management and separate budget should be allocated and utilized for mental health form the health budget.*

Keywords: Depression, women of reproductive age, risk factors and prevalence.

Introduction

Depression is amental disorder, portrayed by an intense and persistent feeling of melancholy, despair, and/or a loss of interest in things that once were enjoyable. Symptoms of depression are depicted as fluctuations in sleep pattern, appetite, or weight and psychomotor activities. It is additionally echoed in the patient‘s decreased energy, feeling of worthlessness or guilt, difficulty in thinking, concentrating, or making decisions. Level of severity can also lead a person suffering from depression to experience thoughts of death or suicidal leading to perhaps plan of killing oneself or attempts to do so. These symptoms diagnosed as depressive disorder if they endure continuously for two or more weeks.(Adewuya, Ola, & Aloba, 2007; Ronald C. Kessler et al., 1994)

Depression has become a significant health concern worldwide because it is not only increasing the morbidity and mortality but also decreasing the quality of one‘s life.Consequently it becomes the greatest burden for all including individuals, families and society (General, 1999; Persad et al., 2003; Sartorius, ÃœstÃ¼n, Lecrubier, & Wittchen, 1996; WHO, 2002; World Health, 2002). As an alarming mental disorder it is considered that depression will become the second leading cause of disability worldwide by the year 2020.(D'Alisa et al., 2006; Murray & Lopez, 1997)

Depression is a complex phenomenon and many factors are involved in the development of this disease (Kazi et al., 2006). Studies described that prevalence of depression among men and women is different and worldwide, women are more vulnerable for this disease as compared to the men because of the many different biological and socio-demographic factors, furthermore the life-time risk of developing depression in women is 10-20% then men(D. G. Blazer, Kessler, &

McGonagle, 1994; Howell, Brawman-Mintzer, Monnier, & Yonkers, 2001) .

Universally it is estimated that 5-10% of the population is suffering from identifiable depression needing psychiatric or psychosocial intervention.(Ronald C Kessler et al., 2010). In Pakistan the prevalence of depression and anxiety disorders is high specially among females as compare to males (Gadit & Mugford, 2007) . According to the previous studies, almost 30-66% women suffer from anxiety and depression.(Faraz Khan, Ansari, Jawad, Dawson, & Baig, 2009; Gadit & Mugford, 2007; David B. Mumford, Saeed, Ahmad, Latif, & Mubbashar, 1997).

Women role and position in our family system make it difficult to identify it as a mental health problem among them and as a major brunt of the family, women remain unconscious and silent about its prevalence. (Gadit & Mugford, 2007; David B. Mumford et al., 1997).In developing countries like Pakistan, lack of awareness also makes it difficult to identify the depressive women and they went under or over recognition. (Itrat, Taqui, Qazi, & Qidwai, 2007; Zafar, Ganatra, Tehseen, & Qidwai, 2006).

There is need for more studies regarding this disease; especially the way it is affecting our women particularly keeping in view the established risk factors like increased age, low socioeconomic status(D. Blazer, Burchett, & George, 1991) gender (Djernes, 2006) low education level, marital status(Luppa et al., 2012) cognitive decline and social support(Djernes, 2006).

Material and methods

Community based cross sectional study was conducted in two areas (Gulshan-eIqbal and Ibrahim Hydari) of Karachi, Pakistan, from January to November, 2016. The objectiveswere to identify the prevalence and socio demographic risk factors associated with depression. A total of 100 Women of reproductive age between 15 to 49 years were participated,

50 from each site. Non probability convenient sampling technique was used to select the study participants, for data collection face to face interviews were conducted.

Data collection instruments

The questionnaire was consisted of socio economic and demographic indicators to meet the study objectives. Information on age, marital status, family structure, education, income, household utilities, assets, construction material,employment status, quality of social relationship was obtained.To measure the depression The SRQ-20 mental health questionnaire was used. (Harding et al., 1980).

Data management and analysis

Data was computerized, cleaned and analyzed using Statistical Package for Social Sciences version 15 (SPSS). SRQ Score was generated based on sum of 20 items, cut-off value of SRQ score was taken 8 and above to classify women as depressed or non-depressed (Harpham et al., 2003)

Descriptive analysis of continuous and categorical variables was estimated using averages/means and proportions respectively. To measure socio-economic status asset based index were developed using principal component analysis which further categorized in five categories to make wealth quintiles(Rutstein, Johnson, & Gwatkin, 2000). The chi-square test was used to elicit associations between dichotomous variables. A logistic regression model was built to identify potential predictors of mental distress among women age 15-49.We chose P = 0.20 as the threshold for including variables in the multivariate model to include all important predictors in multivariate model. Variables were dropped consecutively from multivariable model after careful assessment of confounding. Final model was selected on the basis of statistical and results were reported as

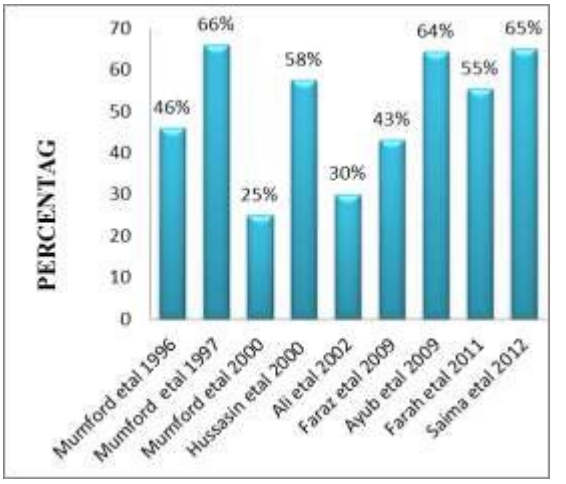
odds ratio and 95% Confidence level (CI).

Results

Prevalence of depression

We studied 100 women of reproductive age to investigate the risk factors of depression. Out of 100 women, the prevalence of depression in our sample was found 66%.Further findings illustrated that the level of depression was same among both the areas.

Figure 1: Trend of depression among Pakistani women



Depression and age

The highest prevalence rate of depression (76%) was seen in the age group of 30-40 years and the lowest rate is observed (57.1%) in the age group of 20-30 years. Analysis shows that risk of depression can increase twofold in this age category of 30-40 years (OR: 2.1) but this effect is not statistically significant.

Depression and education

The illiterate women comparatively lower level (65.5%) of depression compared to educated group. However among educated women higher level of depression seems in low education categories (Table1) .As the level of education increases proportion of depression decreasing gradually from (78%) with primary to 43% in masters category

Depression and marital status

The depression status varies with the marital status,the highest rate of depression is seen in widow or divorced (83.3%), the lowest rate observed among married women (64%) while in unmarried women prevalence of depression found (67%). Likelihood of depression was about 2.5 times higher among widow and divorced women compared to unmarried women however this difference was not statistically significant.

Depression and husband's occupation

The highest level of depression was observed in women whose husbands were associated with private jobs (83.3%). Analysis indicates that husband's private job about 5 times increased the risk of depression in wife. The next highest category is business man (69%) then skilled workers (60%) and professionals (33.3%)

Depression and economic status

Depression scores were not significantly associated with the socio economic status. The analysis showed that similar association with level of depression in all wealth categories. The least level was observed in richer group (50%) and highest in middle income category (75%).

Depression and women empowerment

Women liberty to choose their career pathways for professional growth and financial stability leads towards self-satisfaction and lower the level of depression. We used personal income as a proxy for women autonomy and empowerment. This is apparent from the analysis that the personal income brings satisfaction which lower down the level of depression. Significant association was observed between depression and

in personal income of women (p-value:0.04). Those women whose earning below ten thousand have highest prevalence of depression(85.7%) which goes down gradually to (58.3%) in 10 to 20 thousand and (50%) to above 20 thousand income category . Likelihood of getting depression decrease (20%) if women earning above 20 thousand per month (OR: 0.2) compared to least income category. The association between depression and in personal income is statistically significant

Depression and working and non-working women

Although low prevalence of depression was observed in women who earned themselves, in contrast highest prevalence of depression is seen in working women as compare to non-working (Table 1).This is mainly because in our society mostly women tend to work due to overcome financial crises. Moreover dual responsibilities also increase the chances of getting depression.

The analysis shows that financial difficulties almost twice increase the chances of getting depression, but this effect is not statically significant in our study. Results vary from those women who had financial difficulties in their life in contrast to those who didn‘t have such type of problems (72% Vs 57%).

It is clear from the analysis that majority of the women (88.5%) have higher SRQ scores were those who worked to comply the needs of the dependents .The odds of depression increased to 11 times in this category (p-value: 0.005).However level of depression decreased substantially if own choice is accompanied with need.

Depression and family income

Analysis of family income shows some trend of depression with income bands. Lowest level of depression was observed in highest income category (48%) while highest depression (75%) observed in category earning 10-50 k per month. Surprisingly the lowest income category reported bit lower level of depression (67%); however the results are not significant

Depression and family role

Family is the first basic social institution in society and mainly two types of family systems, among them joint family system considered a healthy family system because close family members or blood relations lives together under one roof. Some of the advantages of joint family system are financial support,co-operation, love, moral support and stand together during any family problem. Our results indicated that those who were residing in nuclear family system were found more depression (70.2%) compared to joint family system (60.5%).

Depression and life satisfaction

Satisfaction with life is a key to healthy life, failing to achieve satisfaction brings multiple types of physiological disorders and depression is one of them. Significant association was observed with life satisfaction and depression (p-value: 0.03). The finding of our study showed that (81.3%) of women found dissatisfied with their life and observed high score of depression compare to satisfy (58.8%) women. The probability of getting depression is 3 times increase with dissatisfaction in life.

Depression and quality of relationship

In addition to life satisfaction, quality of relationship with family also comes out an important significant predictor for depression. Level of depression is highest among those women that were slightly satisfied with their life (85%). In contrast lowest level observed in extremely satisfied women (28%). It also shows a clear gradient with degree of satisfaction, Odds of depression decreases from 14.3 to 5.5 with slightly satisfied to very satisfy in contrast to extremely satisfied with the life.

Depression and stressful life

Stressful life events was powerful predictor of depression among the factors we studied figures showed that loss of job or financial problems leading to homelessness (92.3%) and long term stress at home (78.9%) were the significant contributing factors associated with depression in women. Loss of job leads to 10 times increased the odds of depression (p-value: 0.03) and long term depression leads to 3 times increase in chances of getting depression

Depression and health problem

There was a difference in the level of depression and respondent health, those women who reported health problem which effect or hindrance their routine life had high level of depression (73.8%) in comparison to those who didn‘t have health issues (60.3%). The risk of depression increased about twice with health problems. However this association is not statistically significant. Similarly the more depressive symptoms were reported (74%) among those women whose close family members had health problem which require frequent hospitalization or

affect and hinder their routine life than those who didn‘t face these kinds of problems (64%).

Multivariate analysis

Multivariate analysis reveals borderline association of few predictors with depression which includes health problem (OR: 5.2 95% CI; 0.9-30.2), dissatisfaction from the life (OR: 5.2 95% CI; 0.9-30.2) and personal income above 20,000 are the key indicators which showing strong positive effect in multivariate analysis. If women earning 10-20 thousand monthly the chances of getting depression decreased 80% in comparison to income 10 thousand (OR: 0.2 95% CI; 0.0-1.1) and 90% less in the income group above 20 thousand (OR: 0.1 95% CI; 0.0-1.7)

Table 1: Prevalence of depression by different risk factors

Variable	N	Not depressed (SRQ score<8)	Depressed (SRQ score>=8)	Odds ratio (95% CI)	p-value
Age					
15-20	15	6(40.0)	9(60)	Ref	
20-30	35	15 (42.9)	20(57.1)	0.9 (0.3-3.0)	0.85
30-40	33	8(24.2)	25(75.8)	2.1 (0.6-7.7)	0.27
40-49	17	5(29.4)	12(70.6)	1.6 (0.4-6.9)	0.53
level of education					
Illiterate	32	11(34.4)	21(65.5)	Ref.	
Less than	9	2(22.2)	7(77.8)	1.8 (0.3-10.4)	0.

Primary					49
Middle/SSC/HSC	24	6(25.0)	18(75.0)	1.6 (0.5-5.1)	0.45
Graduation	21	7(33.3)	14(66.7)	1.0 (0.3-3.4)	0.94
Masters	14	8(57.1)	6(42.9)	0.4 (0.1-1.4)	0.15
Marital Status					
Married	58	21(36.2)	37(63.8)	0.9 (0.4-2.1)	0.78
Unmarried	36	12(33.3)	24(66.7)	Ref	
Widow/Divorced	6	1(16.7)	5(83.3)	2.5 (0.3-23.9)	0.43
Married	58	21(36.2)	37(63.8)	0.9 (0.4-2.1)	0.78
Marriage Duration					
Less than 5	8(13.8)	5(62.5)	3(37.5)	Ref	
5- 10 years	14 (24.1)	6(42.9)	8(57.1)	2.2 (0.4-13.2)	0.38
More than 10 years	36(62.1)	10(27.8)	26(72.2)	4.3 (0.9-21.6)	0.07
Occupation					
Govt job/private job	27	8(29.6)	19(70.4)	1.4 (0.5-3.7)	0.52
Business/Self-employment	16	5 (31.3)	11(68.8)	1.3 (0.4-4.2)	0.68
housewife	57	21(36.8)	36(63.2)	Ref	
Husband's occupation					
Unemployed	4(6.9)	2(50)	2(50.0)	Ref.	
Professionals	6(10.3)	4(66.7)	2(33.3)	0.5 (0.0-6.7)	0.60
Skilled worker	20(34.5)	8(40)	12(60)	1.5 (0.2-12.9)	0.71
Business	16(27.	5(31.3)	11(68.8)	2.2 (0.2-20.4)	0.49

	6)				
Private job	12(20.7)	2(16.7)	10(83.3)	5.0 (0.4-59.7)	0.20
Unemployed	4(6.9)	2(50)	2(50.0)	Ref.	
Professionals	6(10.3)	4(66.7)	2(33.3)	0.5 (0.0-6.7)	0.60
Socio Economic status					
poorest	20(20)	7(35.0)	13(65.0)	Ref	
poorer	20(20)	6(30.0)	14(70.0)	1.3 (0.3-4.7)	0.74
middle	20(20)	5(25)	15(75.0)	1.6 (0.4-6.3)	0.49
richer	20(20)	10(50)	10(50)	0.5 (0.2-1.9)	0.34
richest	20(20)	6(30)	14(70.0)	1.3 (0.3-4.7)	0.74
Family Income					
<10,000	15	5(33.3)	10(66.7)	Ref.	
10-50K	47	12(25.5)	35(74.5)	1.5 (0.4-5.1)	0.56
50-100K	17	6(35.3)	11(64.7)	0.9 (0.2-4.0)	0.91
>100K	21	11(52.4)	10(47.6)	0.5 (0.1-1.8)	0.26
Personal income					
<10000	21(48.8%)	3(14.3%)	18 (85.7)	Ref	
10-20K	12 (27.9%)	5 (41.7%)	7(58.3%)	0.2 (0.0-1.2)	0.09

>20K	10(23.3%)	5(50.0 %)	5(50 %)	0.2 (0.0-1.0)	0.04
Reason of Job					
Own choice	12(27.9)	7(58.3)	5(41 .7)	Ref.	
Need	26(60.5)	3(11.5)	23(8 8.5)	10.7 (2.0-56.6)	0.005
Both	5(11.6)	3(60.0)	2(40 .0)	0.9 (0.1-7.8)	0.949

Type of family					
Nuclear	32 (64.0)	25 (50.0)	57(57)	0.157	Nuclear
Joint	18 (36.0)	25 (50.0)	43(43)		Joint
Health problem					
Yes	42	11(26.2)	31(73. 8)	1.9 (0.8-4.4)	0.16
No	58	23(39.7)	35(60. 3)	Ref	

Family member's health problem					
Yes	23	6(26.1)	17(73.9)	1.6 (0.6-4.6)	0.36
No	77	28(63.4)	49(63.6)	Ref	
Financial difficulty					
Yes	60	17(28.3)	43(71.7)	1.9 (0.8-4.3)	0.15
No	40	17(42.5)	23(57.5)	Ref	
Life satisfaction					
Yes	68	28(41.2)	40(58.8)	Ref	
No	32	6(18.8)	26(81.3)	3.0 (1.1-8.3)	0.03

Quality of relationships					
Slightly satisfied	26	4 (15.4)	22 (84.6)	14.3(3.2-62.9)	<0.0001
Moderately satisfied	31	9 (29.0)	22 (71.0)	6.3(1.7-23.1)	<0.0001
Very satisfied	25	8 (32.0)	17 (68.0)	5.5(1.5-20.9)	0.01
Extremely satisfied	18	13 (72.2)	5 (27.8)	Ref.	
Stressful life events					
Death of loved ones	13	6(46.2)	7(53.8)	1.0 (0.3-3.4)	0.98
Divorce or marital problem	7	1(14.3)	6(85.7)	5.1 (0.6-45.4)	0.15
long term stress at home	19	4(21.1)	15(78.9)	3.2 (0.9-11.0)	0.07
loss of job, finical problem leading to homelessness	13	1(7.7)	12(92.3)	10.2 (1.2-84.4)	0.03
Nothing	48	22(45.7)	26(54.2)	Ref	

Multivariate model

Independent variable	OR	95% CI	P-value
health problems which affect or hindrance routine life	5.2	(0.9-30.2)	0.06
Dissatisfaction with life	5.2	(0.9-30.2)	0.06
Personal income			
<10000	Ref		
10-20K	0.2	(0.0-1.1)	0.06
>20K	0.1	(0.0-0.7)	0.02

Discussion

Our results illustrated that the prevalence of depression was 66% among the women of reproductive age belonging in both the areas .This is

a high percentage and shows the same trend in previous studies also(Ayub et al., 2009; N Husain, Chaudhry, Afridi, Tomenson, & Creed, 2007; N. Husain, Creed, & Tomenson, 2000; Nusrat Husain, Gater, Tomenson, & Creed, 2004; David B. Mumford et al., 1997; Saima, Fatmi, & Kazi, 2012). This higher prevalence of depression in females may be due to women bearing more stress in our social and cultural set up along with the added responsibility of the role of caretaker of the whole family (Tareen, 2000).Furthermore, as women are more economically dependent in our society this could be a cause of high percentage of depression.Greater depression level was noted in the age group of 30-40 years whereas lowers rate was observed in 20-30 years of age, which means risk of depression can increase twofold in this age category but in our study this finding is not statistically significant. Moreover other study showed that increasing age is significantly associated with depression (Bhagwanjee, Parekh, Paruk, Petersen, & Subedar, 1998; David Bardwell Mumford, MinhasS, Akhtar, Akhter, & MUBBASHAR, 2000; Pillay & Sargent, 1999; Qadir, 2005). To some extent our results supported this finding and can be quite alarming and harmful in future as well as might have more chances of having severe depression in older age.

Our study on marital status illustrated that highest (83.3%) prevalence rate in separated or divorced women, similar findings were portrayed in other studies(Nusrat Husain et al., 2004; Kornstein et al., 2000; Offord, Boyle, Campbell, & Goering, 1996; Qadir, 2005) Further analysis showed 66.7% unmarried were depressive as compare to married women 63.8%. In our study least proportion was observed in married women,similar finding have been documented in other studies conducted in Pakistan (Akhtar-Danesh & Landeen, 2007; Nisar, Billoo, & Gadit, 2004). Studies described that married women spend healthy life as

compared to single/unmarried (Kornstein et al., 2000; Offord et al., 1996). Previous investigations also showed that marriage provides economic, social, and psychological support, which contributes to a person‘s well-being and helpful for healthy behaviors (Boden, Fergusson, & John Horwood, 2008; Schmidt, Wiemann, Rickert, & Smith, 2006; Vericker, Macomber, & Golden, 2010). But on the other hand findings are also evident that married women are more depressive than unmarried, specifically it was noted in west (Ali & Amanullah, 2000; G. W. Brown & T. Harris, 1978; Dodani & Zuberi, 2000; Fowers, 1991; DAVID B Mumford, Nazir, Jilani, & Baig, 1996; Schumm & Silliman, 1996).Apart in our study depression in unmarried was also observed in other studies may be because it is really hard for single, widow and divorced to survive solely specially in context of Pakistani culture, for instance several factors might hinder by them and they might be anxious about their carrier, support and financial issues(Offord et al., 1996; Spence, 2008). Although depression in least among married women but it has high implications with marriage duration and it is noted that duration of marriage seems to be an important indicator that shows clear gradient with the level of depression. Highest SRQ score was observed with the duration of marriage above 10 years and least depression was detected with less than 5 years of marriage and the borderline association was also found among them (p-value: 0.07). (Rabbani & Raja, 2000)

Overall depression level was found lower in our study in the category of illiterate women compared to educated group but it is noted that among educated women higher level of depression seems in low education. Our results showed that as the level of education increases the proportion of depression decreasing gradually from 78% with primary to 43% in master‘s category. Least educated group experienced the more

depression found in other studies including developing countries as well. (Abas & Broadhead, 1997; Ayub et al., 2009; Bhagwanjee et al., 1998; Deyessa et al., 2009; Fu & Parahoo, 2009; DAVID B Mumford et al., 1996; David B. Mumford et al., 1997; V Patel et al., 1997)

In our study working women has high depression level compared to non-working women similar to other study (Rashid & Mustafa).This finding is contradict from other studies who reported working women had better mental health as well as reported less depression(Al-Modallal, Abuidhail, Sowan, & Al-Rawashdeh, 2010; Field, 1964). Depressive symptoms experienced by working women have been rarely observed in studies may be our finding is contradicted because there is difference in the western countries and Pakistan. In Pakistan working women have to face more difficulties and they experienced more depression as compared to non-working because their attention diverted in two situations and they cannot give proper attention because of social and emotional bindings and according to our norms and values they have to bear dual responsibilities, like women have to pay second shift at home. (Al-Modallal et al., 2010; Panigrahi, Padhy, & Panigrahi, 2014).In this situation only 7% women seemed to balance their roles (Adhikari, 2012) this situation put them at greater risk for developing common mental disorders such as anxiety and depression.(Gove, 1972; Maier et al., 1999; Vikram Patel, Araya, de Lima, Ludermir, & Todd, 1999; WHO, 2001; World Health, 2001). Economic status according to quintile shows that level of depression is about same in all socio-economic groups, while economic status is an important factor that is associated for mental health. Our study did not predict psychological morbidity with the relationship of economic status and some other studies also found similar finding (Batool, Abbasi, Zafar, & Hameed, 2008; Farah, Khan, Medhin, & Prince, 2011; Maziak, Asfar,

Mzayek, Fouad, & Kilzieh, 2002).Interestingly other factors which indicate socio-economic status depicts strong relationship. More community based studies are needed to assess the effect of economic status and mental health in women which is one of the major public health problems.

Financial problem is a causative contribution in psychiatrists‘ morbidity in women. Family income is one of the important indicators of economic status and our results observed the highest prevalence rate of depression (75.4%) in low family income. Earlier work also indicated that lower income associated and raised the risk of depression. (Akhtar-Danesh & Landeen, 2007; Ayub et al., 2009; Deyessa et al., 2009; Fu & Parahoo, 2009; Heneghan, Silver, Bauman, Westbrook, & Stein, 1998; Qadir, 2005; Siefert, Heflin, Corcoran, & Williams, 2001; Tareen, 2000)

Statistically significant association was also observed in the level of depression and in personal income of women (p-value: 0.04). Low-income women‘s risk of depression is almost double that of high income, as less income contributes daily worries about basic needs; personal income provides social and financial advantages that might have a positive impact on their mental health.

Financial problems is major socioeconomic risk factors for mental disorders (Laaksonen et al., 2007). Economic empowerment of women decreases the chances of getting stress, anxiety and depression because their status became pride for them, their family and society as well. Our results clearly showed that level of depression decreased markedly on those women who were doing job or business with their own choice. Women empowerment helps women to stand on their own legs they can earn for them and their family to reduce financial problems and sound professionally.

High SRQ level was obtained from the results among those women who had financial difficulties in their life (72% Vs 57%), finding of our study showed that the financial difficulties almost twice increase the chances of depression but this effect is not significant. It is obvious that survival is very difficult with the financial difficulties (Nusrat Husain et al., 2004; Qadir, 2005)

Family is the first basic social institution in society, it is assumed that extensive family system is a healthy family system because number of people was available in joint family system for take care, emotional and financial support, love , safety and for smooth life as blood relations are presents around in this system under one roof.Our study resultsauthenticates all these statement and found high SRQ scores in nuclear family system (70.2%) compare to joint or extended family system (60.5%) (Zafar et al., 2006)

Poor health contributes to the onset of depression(Heneghan et al., 1998; Siefert et al., 2001).Our results also showed relationship with respondent health status as well as health problem of close family members with depression. Those women who reported health problem which effect or hindrance their routine life had high level of depression with SRQ score (73.8%) comparatively then those who didn‘t have such kind of physical problem (60.3%). This percentage increased depression level about twice because poor health can increase daily hassles, disturbances in routine life as well as reduce pleasure. Several other studies have reported similar findings (De Groot, Auslanden, Williams, Sherraden, & Haire-Joshu, 2003; Heneghan et al., 1998; Siefert et al., 2001) however this association is not statistically significant. Other studies observed similar relationship in general population (N. Husain et al., 2000; Hussain, 2010; Shepherd & Wilkinson, 1988).

Unsatisfactory or unfavorable circumstances in life create disappointment which cause multiple types of physiological disorders and depression is one of them. Link between life satisfaction and depression also defined by Sociologist ―Emile Durkheim‖ in 1951 (Durkheim, 1951; Gunnar & Nelson, 1994). Our results evident that there is strong relationship with life satisfaction and depression and significant association was observed among them (p-value: 0.03). Other Pakistani study also reported a similar association between life satisfaction and depression (Qadir, 2005) and our results indicated that the probability of getting depression is 3 times increase with dissatisfaction in life (81.3% vs 58.8).

Lack of satisfaction in relationship with family members is an important factor for causing mental disturbances. Our findings clearly showed the significant association between quality of life and depression, Odds of depression decreases from 14.3 to 5.5 with slightly satisfied to very satisfy in contrast to extremely satisfied with the life. Similar findings have been reported in another studies conducted in Pakistan. (Mirza & Jenkins, 2004; Niaz, 2004; M. J. Patel et al., 2008) Factors which we studied in our study regarding continuous stress in life, among them some are statistically significant with depression for instance loss of job, financial problems (92.3%) and long term stress at home (78.9%). Furthermore loss of job leads to 10 times increased the odds of depression (p-value: 0.03) and long term depression leads to 3 times increase in chances of getting depression. In developing countries continues stress in life creates sense of helplessness. Prior work also showed the stressful life events were powerful predictor of depression (Al-Ayed, 1998; Batool et al., 2008; Cole, Nolen-Hoeksema, Girgus, & Paul, 2006; Elkerdany, Al-

Eid, Buhaliqa, & Al-Momani, 1999; Heneghan et al., 1998; Siefert et al., 2001).

Social issues directly connected to women‘s mental health and both acute life events also chronic difficulties are consistently reported to be associated with risk for common mental health disorder (Qadir, 2005). In developed countries, a consistent association has been found between adverse life events and depression. (Abas & Broadhead, 1997; G. Brown & T. Harris, 1978; Paykel, 1994)

In our univariate analysis different factors were found significantly associated with depression, and in multivariate model few indicators showed borderline association such as respondent health problem (OR: 5.2 95% CI; 0.9-30.2), dissatisfaction from life (OR: 5.2 95% CI; 0.9-30.2) and personal income are key indicator which showing prospective effect. Alternatively our sample showing higher prevalence of depression and identified various factors associated with depression among women of reproductive age.

5.2 Conclusion

It is concluded from above discussion that women in Pakistan are facing high burden of depressive disorders. Personal income, reason of job, life satisfaction, continuous stress in life, quality of life have been reported as strong predictors of depression among women. High SRQ level were also associated with increasing age, separated or divorced, duration of marriage, working women , low family income , financial difficult and nuclear family.

5.3 Recommendation

In light of this research different recommendations are proposed, focusing on preventive measures for depression and emphasizing on improving the mental health of women. Need to develop strategies for early identification and management, increasing numbers of mental health surveys as in Pakistan and developing countries where no policy exists and the annual financial allocation to mental health in the budget is non-existent or minimal and for future research a larger sample size is recommended to see the more clear pictures and facts.

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Conflict of Interest

All authors declare that they have no conflicts of interest.

Authors' Contributions

Farhana Tabassum conceptualized the study and as principal investigator involved in all aspects of this study. FT was also involved in study design, sampling, data collection procedure, data analysis, interpretation of data and manuscript writing. DrMemoonaSaeedLodhi critically reviewed the final manuscript and oversaw the research work.

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