

Gender and Mental Health

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Abstract

Gender is a significant term that is used to distinguish individuals according to their physical anatomy. It is also significant in knowing individuals, who could be the victims of psychological vulnerabilities. Review of research on mental health revealed that in both sexes, women are more vulnerable to mental health problems than men. It was found that the underlying factor for this is the negative emotional factors and personality factors of women. It was also revealed that socialization process and gender roles also contribute to vulnerability among women all over the world. To know more about this gender issues in mental health among general population who do not visit primary health care centers, the investigator took a small sample of 90 individuals belonging to Vizianagaram and Visakhapatnam-north coastal areas of Andhra Pradesh who are belonging to the age range of 20 to 59, using purposive sampling technique. So far researchers who have done research on gender and mental health have used General Health Questionnaire. An attempt is made to use an empirical based valid screening tool i.e., Achenbach's Adult Self-report for the purpose of data collection. Further statistical analysis is done by using correlation, t-test and coefficient of contingency. Results revealed that gender differences were found in antisocial personality problems. It showed that the comparison between age and anxious-depressed scale and between age and attention problems have significant difference. It was found that more people of 20-29 years age group were prone to anxious-depressed problems, attention problems, when compared to other age groups. Only for somatic complaints scale more people are found to be between the age range of 30-44 years.

Keywords: Gender, Mental Health, antisocial problems

1. Introduction

The above definition laid on by W.H.O clarified that a mentally ill person is one whose health status, in all the above four areas is malfunctioned. But it was found that in different societies there were stigmas which were so established that labeling an individual as mentally ill became a common practice. In mental health institutes, the cases reported also indicated that there were gender differences in prevalence of specific mental disorders. This was explained by psychologists as follows: Gender affects many aspects of life, including access to resources, methods of coping with stress, styles of interacting with others, self-evaluation, spirituality, and expectations of others. These are all factors that can influence mental health either positively or negatively. Psychological gender studies seek to better understand the relationship between gender and mental health in order to reduce risk factors and improve treatment methods.

2. Review of Related Literature

Research done on mental health in several countries, reveal that there are gender differences in prevalence rates of mental disorders. These studies can be categorized as follows:

1. Gender differences in psychiatric morbidity.
2. Gender differences in common mental disorders.
3. Gender differences in Stress disorders.
4. Gender differences in Depression.
5. Gender differences in Bipolar Disorders.

2.1 Gender differences in psychiatric morbidity.

Most of the researches indicate that the gender differences were found in psychiatric morbidity, in common mental disorders stress disorders, in depression, and in bipolar disorders. More female than male exhibited

higher levels of minor psychiatric morbidity than did male subjects especially it was in 1:2 ratio (Mumford, Saeed , Ahmad , Latif , Mubbashar ,1997;Bhargavi Davar, 1999).Levels of emotional distress increased with age in both genders. Women living in unitary households reported more distress than those living in extended or joint families. With younger men and women, lower levels of education were associated with greater risk of psychiatric disorders. Social disadvantage was associated with more emotional distress (Mumford, Saeed , Ahmad , Latif , Mubbashar ,1997). Epidemiological data for Oslo show that the lifetime and 12-month prevalence of mental disorder are quite high, with alcohol abuse/dependence and major depression particularly frequent. The rates for women are higher than those for men for all diagnostic categories, except for alcohol and drug abuse/dependence (Einar , Svenn , and Victoria, 2001; [Alonso](#), [Angermeyer](#), [Bernert](#), [Bruffaerts](#), & et al, 2004; De Girolamo , Polidori, Morosini , Scarpino , Reda , Serra , Mazzi , Alonso , Vilagut , Visonà , Falsirollo, Rossi , Warner, 2006). The long-term risk of suicide in the context of a past episode of minor mental disorder is higher in males than females. Female patients had distinctly higher percentages in psychotic disorders, mood disorders & conversion disorders, compared to the male patients (Niaz, Hassan, Husain & Siddiqui , 2004; WHO, 2004). The probability of mental disorder was 19.4% in women and 8.59% in men (Fakhari , Ranjbar, Dadashzadeh, Fatemeh, 2007.).

2.2 Gender differences in Common Mental Disorders

Most of the studies were done related to anxiety and substance-use disorders. The prevalence of common mental disorders (mood, anxiety, and substance use and somatoform disorders) is higher among females, with the exception of substance use disorders. Young age was related to substance disorders both in women and in men. Not being married and being unemployed were associated with increased rates of mental disorders in both sexes, but in men stronger than in women. Being retired was associated with depression only in women, whereas belonging to a higher social class, working fulltime and having children appeared to be protective factors for men only. Other socio-demographic factors (concerning education, employment and family status) were not associated with increased rates of mental disorders both in women and men (Klose and Jacobi, 2004). Women were also more likely than men to have a history of victimization, particularly in the area of sexual abuse ([DiNitto](#), [Webb](#), and [Rubin](#), 2002). An examination of the prevalence and approximate rates of mental illness among women in Calcutta, India revealed that the mental disorders associated with women are: mental retardation, pscyhoses, abnormal personality, paranoia, psychoneuroses, and distress. The common symptoms are identified as anxiety, depression, somatization, conversion disorder or hysteria, obsessive compulsive disorders, phobias, purity mania or suchibai, and possession state. Some important correlates of mental disorders in women are age, marital status, economic status and location, education, and joint families. It is concluded that common mental disorders are highly prevalent among Bengali women (Ajita Chakraborty, 2005). An investigation on gender differences in anxiety among volunteer undergraduates recruited from sixteen Islamic countries revealed that there are significant gender differences in 11 Islamic countries out of 16 in which females tended to be higher on the anxiety scale and the reason was attributed to socialization process, especially sex-typing and gender roles (Alansari, 2006).

2.3 Gender differences in stress disorders

Women had a higher prevalence of lifetime – and post accident generalized anxiety disorder (Freedman Gluck, Rivka, Brandes, et al , 2002). It showed that the relationship between ASD and PTSD was more established in female than male (Bryant & Harvey ,2003). The women scored significantly higher than the men in chronic stress and minor daily stressors. Women reported that their stressors are health-related events, whereas the men listed relationship, finance and work-related events. The women scored significantly higher than the men on the emotional and avoidance coping styles where as men were found to have more emotional inhibition than the women (Matud ,2005).

2.4 Gender differences in depression,

It was found that female have more depression than male, that to during child-bearing years. These studies also indicated that female have somatic depression more than male. (Blazer, Kessler, McGonagle and Swartz, 1994). More women than men were diagnosed as having a mood disorder (31% vs 19%), and functional impairment scores were significantly lower in women than in men (Janet, Robert, Mark, Kurt, Steven, Frank and Amy Lazev, 1995). Women were less likely to be married and had a younger age at onset and greater family history of affective disorder compared to men. (Kornstein, Schatzberg, Thase & et al , 2000). The

prevalence of somatic depression but not pure depression was much higher among women than men. Gender differences in depression may result from a difference in a specific type of depression-anxious somatic depression (silverstain , 2002). Women found to have a younger age at onset of the first major depressive episode. Alcohol and drug abuses were more common in men. Female found to be more vulnerable to depression than male due to negative emotional factors. Men coped by increasing their sports activity and consumption of alcohol and women through emotional release and religion (Angst, Gamma, Gastpar, Lepine et al. , 2002). Higher education reported to be reducing depression in female excess (Lucht, Schaub, Meyer, Hapke, Rumpf, Bartels, Houwald, Barnow, Freyberger, Dilling and John 2003). Levels of neuroticism, agreeableness, extraversion, and conscientiousness were significantly higher among females than among males; in contrast, level of openness to experience was significantly higher among males. Female gender was associated with increased odds of experiencing depression. Results showed that neuroticism played a significant contributory role in the relationship between being female and major depression (Goodwin & Gotlib, 2004; Carrillo, Rojo & Staats, 2004). Women who had family/friends with depression had less stigma than women who did not have. This was not observed in men. Among male participants, significant interactions between being a health professional, having close family/friends with depression and reporting “weakness of character” as a causal factor for depression were found (JianLi , Gordon , Carol and Daniel 2007). The lowest and highest rates of depression are seen among people living with their married partners and divorced individuals, respectively. Prevalence of depression among people who live with common-law partners is similar to rates of depression among separated and divorced individuals. The lowest and highest rates of depression based on the level of education is seen among individuals with less than secondary school and those with "other post-secondary" education, respectively. (Noori and Janet, 2007).

2.5 Gender differences in Bipolar Disorders,

it was found that the onset of bipolar disorder tends to occur later in women than men and women more often have a seasonal pattern of the mood disturbance Female gender was significantly associated with atypical features, but not with diagnosis. Age at onset was significantly lower in bipolar II females than in unipolar females. (Benazzi, 1999 ; Arnold, 2003), Women, however, may be more likely than men to be hospitalized for manic episodes. While both men and women with the illness have high rates of comorbidity with alcohol and other substance use disorders, women with bipolar disorder are at a particularly high risk for comorbidity with these conditions (Hendrick, Altshuler, Gitlin, Delrahim, Hammen, 2000) Bipolar II disorder, which is predominated by depressive episodes, also appears to be more common in women than men. In the general population, more men than women with bipolar disorder met the criteria for lifetime alcoholism. Most of the bipolar subjects also had ADHD (Biederman , Kwon, Wozniak, Mick, Markowitz, Fazio, Faraone, 2004). Among patients treated in outpatient settings more men than women presented with comorbid substance abuse and among patients treated during hospitalization more women than men presented with mixed episodes (Kessing, 2004). Compared with men, women had higher rates of Bipolar II comorbid thyroid disease, bulimia and post-traumatic stress disorder. Men also had higher rates of comorbid alcohol abuse/dependence, cannabis abuse/dependence, pathological gambling and conduct disorder (Baldassano, Marangell, Gyulai, Nassir Ghaemi , Joffe, Kim, Sagduyu, Truman, Wisniewski, Sachs, Cohen, 2005). Men were more likely to report 'behavioural problems' and 'being unable to hold a conversation' during mania . Women reported higher rates of comorbid eating disorders, and weight change, appetite change and middle insomnia during depression Kawa, Carter, Joyce, Doughty, Frampton, Wells, Walsh, Olds , 2005). Women with bipolar disorder had 4 times the rate of alcohol use disorders and 7 times the rate of other substance use disorders than reported in women from community-derived samples (Hendrick, Altshuler, Gitlin, Delrahim, Hammen, 2000). Men had a significantly earlier onset of first-episode mania and bipolar disorder, with childhood antisocial behavior also being significantly associated, after multivariate analysis. Women had higher incidence rates of bipolar I disorder throughout adult life, except for early life ages 16-25 years (Kennedy, Boydell Kalidindi, Fearon, Jones, van Os, Murray, 2005).

It was found that the underlying factor for this is the negative emotional factors and personality factors of women. It was also revealed that socialization process and gender roles also contribute to vulnerability among women all over the world.

OBJECTIVES :-

- 1) To study the gender differences in prevalence of common mental health disorders in general population
- 2) To study the age group, that was more susceptible to certain kinds of common mental health disorders.

HYPOTHESIS :-

- 1) There is no significant difference between males and females in total score of ASR forms.
- 2) There would be no significant difference between males and females in
 - a. Anxious- Depressed scale,
 - b. Withdrawn scale,
 - c. Thought problems scale,
 - d. Attention problems scale,
 - e. Aggressive behavior scale,
 - f. Rule-breaking behavior,
 - g. Intrusive behavior scale of syndrome scales of ASR forms.
- 3) There would be significant difference between males and females in somatic complaints scale of syndrome scales of ASR forms.
- 4) There would be no significant difference between males and females in
 - a) Avoidant personality problems scale,
 - b) Attention Deficit Hyperactivity disorders (ADHD) scale, of DSM-IV scales of ASR forms.
- 5) There would be significant difference between males and females in
 - a) Depressive scale,
 - b) Anxiety problems scale,
 - c) Somatic problems scale
 - d) Antisocial personality problems scale of DSM-IV scales of ASR form.

3. Methodology

SAMPLE: The sample selected for the present study is 90. It constituted of people of different age groups starting from 20 years to 59 years. For this the sampling technique used is purposive sampling. In the sample 60 were from Visakhapatnam and 30 were from Vizianagaram.

TOOL: The tool used for the present study is Achenbach's Adult Self Report (ASR) form for 18-59 year old. One week test-retest reliability for ASR form syndrome scales is from 0.79 to 0.91. DSM-IV scales is from 0.77 to 0.85. Long term stability was ranging from 0.69 over a two year period interval to 0.58 to 0.60 over 39 to 44 months. The construct validity was obtained by finding significant predictive relations from ASEBA child and adolescent syndrome scores to the corresponding syndrome scores assessed with ASEBA adult instruments over a period upto 10.5 years in general populations and clinical samples. Significant associations have been found between ASEBA adult scales and Beck Depression inventory, Beck anxiety inventory, the MMPI and SCL-90-R and significant association with intervention 15-20 years earlier and with child depression scores obtained at age 11.

For the present study the Telugu version of ASR form has been used.

DESIGN:

Design of the present study is field study and is exploratory in nature.

Table -1 :Distribution of sample according to gender and age

GENDER	20-29	30-44	45-59	TOTAL
Male	15	15	15	45
Female	15	15	15	45
TOTAL	30	30	30	90

It shows that for each age group there are equal number of individuals, i.e, 30 individuals, among which 15 are males and another 15 are females.

PROCEDURE:

At first the investigator has consulted individuals within the specified age range. They were told about the purpose in general and simple terms. Those who were willing to participate in the study have been incorporated in the sample. Now they were administered ASR form (Telugu version) and were told that each statement represents the events related to human general behavior. They were told to read each of these statements and rate them considering their occurrence in the past 6 months in their lives. They were told to rate '0', if the statement is "not true"; '1', if it is "some what true" and '2', if it is "almost true".

STATISTICS USED:

Frequencies, correlations, t-test, coefficient of contingency.

requires nine operators, by estimate, to run the ten machines on the production floor.

4. Analysis

Table-2 : Frequency of Occupations in the sample

Occupation	Frequency	Percent
Low income	7	7.8
White collared	19	21.1
Professional	19	21.1
House-wife	25	27.8
Student	11	12.2
Self-employees	6	6.7
Total	87	96.7
Missing	3	3.3
Total	90	100.0

Table-3 : Frequency of Education qualification in the sample

Education qualification	Frequency	Percent
Tenth class	17	18.9
Intermediate	9	10.0
Degree	34	37.8
Post. Graduation	21	23.3
"Below tenth"	6	6.7
Total	87	96.7
Missing	3	3.3
Total	90	100.0

Table-4 : Frequency of Family type in sample

Family type	Frequency	Percent
Valid	2	2.2
Joint	33	36.7
Nuclear	55	61.1
Total	90	100.0

Table-5 : Frequency of marital status in sample

Marital status	Frequency	Percent
Married	66	73.3
Unmarried	24	26.7
Total	90	100.0

Table -6 : Correlations between gender and Syndrome Scales of ASR form

SCALE	Pearson's Correlation
Anxious-depressed	-0.06
Withdrawn	-0.07
Somatic complaints	0.06
Thought problems	-0.15
Attention problems	0.03
Aggression	0.01
Rule breaking behavior	-0.18
Intrusive behavior	-0.16

Table -7 : Correlations between gender and DSM-IV Scales of ASR form

SCALE	Pearson's Correlation
Depression	-0.03
Anxiety problems	0.10
Somatic problems	0.13
Avoidant Personality	-0.12
ADHD	0.09
Antisocial Personality	-0.25*

* Correlation is significant at the 0.05 level (2-tailed).

Table-8 : t-test for Total Score of ASR form

Gender	n	Mean	Standard deviation	t-value
Male	45	67.64	29.28	0.69
Female	45	63.62	26.39	

The above table shows that there is no significant difference between males and females in the total scores.

Table-9 : t-test for Syndrome Scales of ASR form

Scale	Gender	n	Mean	Standard deviation	t-value
Anxious-depressed	male	45	8.44	6.37	0.61
	female	45	7.67	5.79	
Withdrawn	male	45	4.16	3.07	0.65
	female	45	3.73	3.09	
Somatic complaints	male	45	2.78	2.97	-0.54
	female	45	3.11	2.89	
Thought problems	male	45	4.02	3.29	1.39
	female	45	3.22	2.01	
Attention problems	male	45	7.93	4.43	-0.23
	female	45	8.20	5.09	
Aggression	male	45	7.18	4.57	-0.11
	female	45	7.29	4.66	
Rule-breaking behavior	male	45	4.47	4.21	1.68
	female	45	3.22	2.66	
Intrusive behavior	male	45	2.69	2.02	1.36
	female	45	2.13	1.84	

The above table shows t-test results for the listed 8 syndrome scales. The t-test results indicate that there were no significant gender differences found regarding ASR form syndrome scales.

Table-10 : t-test for DSM-IV scales of ASR form

Scale	Gender	n	Mean	Standard deviation	t-value
Depression problems	male	45	5.84	4.26	0.30
	female	45	5.58	4.31	
Anxiety problems	male	45	4.09	2.68	-0.98
	female	45	4.67	2.94	
Somatic problems	male	45	1.98	2.35	-1.18
	female	45	2.58	2.46	
Avoidant personality problems	male	45	3.69	2.68	1.13
	female	45	3.09	2.35	
ADHD problems	male	45	6.27	4.31	-0.85
	female	45	7.07	4.66	
Antisocial personalityproblems	male	45	7.22	5.43	2.39*
	female	45	5.00	3.08	

(*p<0.05)

The above table shows the t-test results for DSM-IV scales of ASR form. The t-test results indicate that except for antisocial personality scale, it was found that there was no significant gender differences for the remaining DSM-IV scales of ASR form. For Antisocial personality problems there was found significant gender differences at 0.05 level of significance. It shows that the male are having more antisocial personality problems than female.

Table-11 : Comparison of age with syndrome scales of ASR form

SCALE/RANGE		20-29	30-44	45-59	χ^2
Anxious-Depressed	<12	18	24	25	0.64*
	12-15	7	3	1	
	>15	5	3	4	
Withdrawn	<5	15	21	18	0.49
	5-6	8	4	8	
	>6	7	5	4	
Somatic complaints	<6	25	24	25	0.43
	6-7	1	3	3	
	>7	4	3	2	
Thought problems	<4	10	24	18	0.51
	4-5	9	2	5	
	>5	11	4	7	
Attention problems	<11	22	23	21	

	11-14	4	5	8	0.61*
	>14	4	2	1	
Aggression	<9	14	25	20	0.54
	9-13	10	4	8	
	>13	6	1	2	
Rule-breaking	<4	12	21	19	0.52
	4-8	13	6	9	
	>8	5	3	2	
Intrusive	<4	18	27	24	0.41
	4-6	9	3	6	
	>6	3	0	0	

* $p < 0.05$

The above table shows that there is significant difference between age and Anxious-depressed scale at 0.05 level. It also shows that there is significance difference between age and attention problems scale. It also shows that there is significant difference between age and attention problems scale of ASR forms.

Table-12 : Comparison of age with DSM-IV scales of ASR form

SCALE		20-29	30-44	45-59	ψ^2
Depression problems	<7	16	20	20	0.46
	7-10	7	6	6	
	>10	7	4	4	
Anxiety problems	<7	20	25	24	0.46
	7-9	8	3	5	
	>9	2	2	1	
Somatic problems	<4	23	23	24	0.37
	4-5	3	2	3	
	>5	4	5	3	
Avoidant Personality problems	<5	18	24	24	0.45
	5-6	6	3	4	
	>6	6	3	2	
ADHD problems	<10	19	25	23	0.55
	10-12	6	3	4	
	>12	5	2	3	
Antisocial personality problems	<6	7	23	20	0.59
	6-10	16	4	5	
	>10	7	3	5	

The above table shows that there is no significant relationship between age and DSM oriented scales of ASR form.

5. Results and discussion

The above analysis yielded the following results –

- The correlation between gender and total score (i.e., 0.07) found to be not significant. The t-test results also indicated the same.
- The correlations between gender and each of the syndrome scales (which are shown in Table-6) found to be not significant. The t-test results also indicate the same (shown in Table-9). This means that there was no gender differences found with regard to syndrome scales of ASR form.
- Except for the correlations between gender and antisocial personality problems, the correlations between gender and all other DSM-IV scales were found to be not significant (shown in Table-7). The t-test results also indicated the same (shown in Table-10).
- The correlation between gender and antisocial personality problems found to be -0.25, which is negatively significant at 0.05 level. The t-test results also indicated the same. It has also showed that the males were found to be having more antisocial personality problems than the females (the mean for males is 7.22 and mean for females is 5).
- Table-11 shows that the comparison between age and syndrome scales. It showed that the comparison between age and anxious-depressed scale and between age and attention problems have significant difference.
- The comparison of age and anxious-depressed problems scale yielded a contingency coefficient of 0.64 which is significant at 0.05 level. It was found that more people of 20-29 years age group (5) were prone to anxious-depressed problems when compared to other age groups.
- The comparison of age and attention problems scale yielded a contingency coefficient of 0.61 which is significant at 0.05 level. It was found that more people of 20-29 years age group (4) were prone to attention problems when compared to other age groups.
- The comparison between age and DSM-IV oriented scales showed that there was no significant difference found between different age groups and DSM-IV oriented scales (shown in Table-12).
- But the descriptive analysis shows that both for syndrome scales and DSM-IV oriented scales, the age group which is more consistent in results is 20-29 years. Only for somatic complaints scale more people are found to be between the age range of 30-44 years.

CONCLUSION:

Previous studies that have focused on studying gender differences in prevalence of mental health disorders have proclaimed that the gender differences are found for depression, anxiety disorders, and antisocial personality disorders. But the present study results are proved to be contradictory to the previous studies results (except for antisocial personality disorder). This may be attributed to the inclusion of people of different age groups into the sample.

LIMITATIONS OF THE STUDY :

- ✓ The sample size is too small thus the results should not be generalized
- ✓ The sampling technique used may not reflect the accurate results in the population.

References

1. Ajita Chakraborty (2005). Reassessing mental health of women in Calcutta. *Journal of the Indian Medical Association*, Vol. 103(2) 72, 74-76, 98.
2. Alansari B.M (2006). Gender differences in anxiety among undergraduates from sixteen Islamic countries. *Social Behavior and Personality*, Vol. 34(6), 651-660.
3. Alansari B.M (2006). Gender differences in depression among undergraduates from seventeen Islamic

- countries. *Social Behavior and Personality*, Vol. 34(6), 729-738.
4. Alonso J, Angermeyer M.C, Bernert S, Bruffaerts R, & et al(2004). Prevalence of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatrica Scandinavica Supplement*. Vol. 420, 21-27.
 5. Angst J, Gamma A, Gastpar M, Lépine J.P et al (2002). Gender differences in depression: Epidemiological findings from European DEPRES I and II studies. *European Archives of Psychiatry & Clinical Neuroscience*, Vol. 252(5), 201-209.
 6. Arnold L.M (2003). Gender differences in bipolar disorder. *Psychiatric Clinics of North America*, Vol. 26(3), 595-620.
 7. Baldassano C.F, Marangell L.B, Gyulai L, Nassir Ghaemi S, Joffe H, Kim D.R, Sagduyu K, Truman C.J, Wisniewski S.R, Sachs G.S, Cohen L.S(2005). Gender differences in bipolar disorder: retrospective data from the first 500 STEP-BD participants. *Bipolar Disorder*, Vol.7(5), 465-470.
 8. Benazzi F (1999). Gender differences in bipolar II and unipolar depressed outpatients: a 557-case study. *Annals of Clinical Psychiatry*, Vol.11(2), 55-59.
 9. Bhargavi .D (1999). *Mental Health of Indian Women: a feminist agenda*, Sage publications, New Delhi, p.g: 57,59.
 10. Biederman J, Kwon A, Wozniak J, Mick E, Markowitz S, Fazio V, Faraone SV(2004). Absence of gender differences in pediatric bipolar disorder: findings from a large sample of referred youth. *Journal of Affective Disorder*, Vol. 83(2-3), 207-14.
 11. Blazer D.G, Kessler R.C, McGonagle K.A and Swartz M.S(1994). The prevalence and distribution of major depression in a national community sample: the National Comorbidity Survey. *American Journal of Psychiatry* Vol.151, 979-986.
 12. Bryant R.A & Harvey A.G (2003). Gender differences in the relationship between acute stress disorder and post-traumatic stress disorder following motor vehicle accidents. *Australian & New Zealand Journal of Psychiatry*, Vol. 37(2), 226-229.
 13. Carrillo J.M, Rojo N& Staats A.W (2004). Women and vulnerability to depression : some personality and clinical factors. *Spanish Journal of Psychology*, Vol. 7(1), 29-39.
 14. DiNitto, D. M., Webb, D. K., & Rubin, A. (2002). Gender differences in dually-diagnosed clients receiving chemical dependency treatment. *Journal of Psychoactive Drugs*, Vol. 34, 105–117.
 15. Einar K, Svenn T, and Victoria C (2001). A Norwegian Psychiatric Epidemiological Study. *American Journal of Psychiatry*, vol.158, 1091-1098.
 16. Fakhari A, Ranjbar F, Dadashzadeh H, Fatemeh M(2007). An epidemiological survey of mental disorders among adults in the North, West area of Tabriz, Iran. *Pakistan Journal of Medical Sciences*, Vol. 23 No.1 54-58.
 17. Freedman S. A, Gluck N; Rivka T.M; Brandes. D, et al (2002). Gender differences in responses to traumatic events: a prospective study. *Journal of Traumatic Stress*, Vol. 15(5), 407-413.
 18. Goodwin R.D & Gotlib I.H (2004). Gender differences in depression: the role of personality factors. *Psychiatry Research*, Vol. 126(2), 135-142.
 19. Hendrick V, Altshuler L.L, Gitlin M.J, Delrahim S, Hammen C (2000). Gender and bipolar illness. *Journal of Clinical Psychiatry*, Vol. 61(5), 393-396.
 20. Janet B. W , Robert L. S, Mark L, Kurt K, Steven R. H, Frank V.G and Amy Lazev BA (1995). Gender differences in depression in primary care. *American Journal of Obstetrics and Gynecology*, Volume 173(2), 654-659.
 21. JianLi W, Gordon F, Carol A and Daniel L (2007). Gender specific correlates of stigma toward depression in a Canadian general population sample. *Journal of Affective Disorders*, Vol. 103(1-3), 91-97 .
 22. Kawa I, Carter J.D, Joyce P.R, Doughty C.J, Frampton C.M, Wells J.E, Walsh A.E, Olds R.J(2005). Gender differences in bipolar disorder: age of onset, course, comorbidity, and symptom presentation. *Bipolar Disorder*. Vol. 7(2), 119-125.
 23. Kennedy N, Boydell J, Kalidindi S, Fearon P, Jones P.B, van Os J, Murray R.M (2005). Gender differences in incidence and age at onset of mania and bipolar disorder over a 35-year period in Camberwell, England. *American Journal of Psychiatry*, Vol.162(2), 257-262.
 24. Kessing L.V(2004). Gender differences in the phenomenology of bipolar disorder. *Bipolar Disorder*.

25. Klose .M and Jacobi .F (2004). Can gender differences in the prevalence of mental disorders be explained by sociodemographic factors? *Archives of Women's Mental Health*, Vol. 7(2), 133-148.
26. Kornstein S.G, Schatzberg A.F, Thase M.E, Yonkers K.A, McCullough J.P, Keitner G.I, Gelenberg A.J, Ryan C.E, Hess A.L, Harrison .W , Davis S.M and KellerM.B (2000). Gender differences in chronic major and double depression. *Journal of Affective Disorders*, Vol. 60(1), 1-11.
27. Lucht .M, Schaub R.T, Meyer .C, Hapke .U, Rumpf H.J, Bartels .T, Houwald .J, S. Barnow, Freyberger H.J, Dilling .H and John .U (2003). Gender differences in unipolar depression: a general population survey of adults between age 18 to 64 of German nationality. *Journal of Affective Disorders*, Vol. 77(3) , 203-211.
28. Matud M.P (2005). Gender differences in stress and coping styles. *Personality & Individual Differences*, Vol. 37(7), 1401-1415.
29. Mumford D.B, Saeed .K, Ahmad .I, Latif .S, Mubbashar M.H (1997). Stress and psychiatric disorder in rural Punjab: a community survey. *British Journal of Psychiatry*, Vol. 170, 473-478.
30. Niaz .U, Hassan .S, Husain .H & Siddiqui S.S(2004). A Cross-Sectional Study Of The Frequency Of Psychiatric Morbidity In Affluent Urban Population Of Karachi. *Pakistan Journal of Medical Science*. Vol. 20(4), 337-344.
31. Noori A.D and Janet .L (2007). Relation between depression and sociodemographic factors. *International Journal of Mental Health Systems* , Vol. 1(4), 1186/1752-4458-1-4.
32. Silverstein .B (2002). Gender differences in the prevalence of somatic versus pure depression : a replication. *American Journal of Psychiatry*, Vol. 159(6), 1051-1052.
33. WHO (2004). Gender and Mental Health. Department of Gender, Women and Health Family and Community Health, World Health Organization, (WHO/GMH/ NLM : W84.3) WHO Document Production Services, Geneva, Switzerland.

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