

ASSOCIATION OF LOWER SELF ESTEEM WITH DEPRESSION: A CASE CONTROL STUDY

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ABSTRACT

Objectives: To estimate the level of low-self esteem in index depressed patients and compare them with their first-degree relatives to determine low self esteem as a risk factor for depression.

Material and Methods: This case control study (150 cases and 150 controls) was conducted on adult depressed patients (cases) and their healthy first-degree relatives (controls) attending psychiatric out patients' clinic of the Aga Khan University Hospital from April 1, 2005 to September 1, 2005. We used convenient method of sampling. Self-esteem was measured by Urdu version of Rosenberg Self-esteem Scale. Logistic regression was applied for multivariate analysis.

Results: Out of 300 (169 males, 131 females) participants, 216(75%) were married. Cases and controls were fairly matched on socio demographic variables except on marital status, educational level and monthly income that showed significant difference. Main logistic regression shows that depressed patients had significantly lower self esteem than non depressed population (OR= 8.05, 95%CI -3.5-14; p=0.001). Male gender had lower self-esteem. (OR=3.50, p=0.005). Self-esteem increased with advancing age. Age group 55-65 had the highest level of self-esteem (OR, .45.CI, 3-4.2, p=0.005). Undergraduates had significantly lower level of self-esteem. (OR 2, CI.03-1.18, p =0.005). Depressed patients, having the illness for more than one year; were 2.75 times more likely to have lower self-esteem. (OR, 2.75, CI, .97-2.5, p= 0.001).

Conclusion: Association of depression and low self esteem as a state was replicated. Duration of illness and male gender were significantly associated with low self-esteem.

Key Words: Depression, Low Self Esteem, Rosenberg's Self Esteem Scale.

INTRODUCTION

One of the earliest ways of systematically classifying definition of self esteem was developed by Wells and Marwell, based on two psychological processes evaluation and affection. It refers to an individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes or likes himself or herself.¹ Cross-cultural studies looking at various self-esteem measures indicate that nearly all measures are normally distributed.² Self-esteem is an important component of psychological health and much of the earlier research indicate that lowered self-esteem frequently accompanies psychiatric disorders.³⁻⁵ Lower self-esteem (LSE) has been a frequent finding in depression and suicidal behaviour⁶ and could be a pathway in the development of depression.⁷ It is one of the

prognostic indicators in depression.⁸ Self-esteem may vary across time.⁸ Individuals in whom it varies from time to time are more emotionally unstable and have extreme mood reactivity. They⁷ react sharply to self-esteem threats⁹, and experience more depression in the face of stressful situation.¹⁰ It is suggested that low self-esteem is an individual personality trait. It could either be high or low, but essentially remains stable throughout the life.¹¹ If this is true, then lower self esteem (LSE) might be the cause rather than the effect of depressive illness. Similarly if LSE is a stable personality trait then first degree relative of an affected individual are more likely to have a low self esteem as a trait, because they share much of the environment, genetic make up and rearing practices. Objectives of this study was to estimate the level of low-self esteem in index depressed patients and compare them with their first degree

UNIVARIATE ANALYSIS COMPARING VARIABLES OF CASES AND CONTROL

Variables		Cases (%)	Control (%)	Univariate or*(95%CI)
Gender	Male	82(27)	87(29)	
	Female	70(23)	61(20)	
Age (in years)	18-24	30 (10)	26 (8.66)	
	25-34	66 (22)	58 (19)	
	35-44	50 (16)	46 (15.32)	
	45-54	7 (2.33)	9 (3)	
	55-65	5 (1.66)	3 (1)	
Marital status	Single	43 (14.3)	39 (13)	1.56 (0.51-1.15)
	Married	116 (37)	100(30)	
Educational level	Illiterates	43(14.3)	39(13)	2.40 (1.40-4.17)
	Undergraduates	61(20)	78(26)	
	Graduate	32(10)	36(12)	
	Postgraduate	5(1.6)	3 (1)	
Occupation	Student	15(5)	14(4.6)	
	H/wife	56(18)	62(20)	
	Unemployed	59(19)	45(15)	
	Business persons	24(8)	22 (7.3)	
	Laborers	5(1.6)	7(1.7)	
Income level (Rs)	3000-10000	28(9.3)	30(10)	1.68 (1.00-2.86)
	10000-20000	91(30)	77(25)	
	Above 20000	17(5.6)	57(19)	

*Odd Ratio

Table 1

relatives to determine low self esteem as a risk factor for depression.

MATERIAL AND METHODS

Sample

With 95% confidence interval (CI) and p -value < 0.05, the approximate sample size was calculated to be 300 i.e. 150 cases and 150 controls. We used convenient method of sampling. All depressed patients between the ages of 18-65, and their first-degree relatives who attended psychiatric out patients' clinic of the Aga Khan University Hospital for the first time, during April 1, 2005 to September 1, 2005, completed Urdu version of Rosenberg Scale. Ethical approval was obtained from department of psychiatry.

Interview and assessment of symptoms:

Adult patients' who met the Diagnostic and Statistical Manual (DSM-IV) criteria for depression were included as cases. Healthy first-degree adult relatives accompanying them were taken as controls. Patients of cognitive impairment, delirium, chronic medical illnesses, psychotic disorders, personality disorder, substance abuse and unaccompanied patients were excluded from the study. Informed consent was obtained from the participants.

Assessment of self-esteem:

Subjects were asked to fill the Urdu version of *Rosenberg Self-esteem Scale* (RSS). RSS consists of ten-item, rated on four point likert scales ranging from strongly agree to strongly disagree.

Statistical analysis:

Study follows a case control design. A logistic regression model yielding odds ratios was estimated to identify the demographic factors associated with lower self-esteem while taking Lower Self Esteem as dependent variable. The dependent variable was dichotomously defined as lower or normal self-esteem.

A 2x2 table was constructed for the cases and non-cases. Low self-esteem was taken as a risk factor for exposure associated with cases and control. Logistic regression was applied for multivariate analysis; odds ratios were calculated based on the scores on Rosenberg self esteem scale. Odds ratio greater than one pointed towards risk for lower self-esteem.

RESULTS

Out of 300 participants (150 cases and 150 controls), 169 were males and 131 were females.

MAIN LOGISTIC REGRESSION MODEL FOR LOWER SELF ESTEEM IN HOSPITAL BASED POPULATION

Variables		Adjusted *OR	95%CI	p-value
Depression	No	1		
	Yes	8.05	3.5-14	0.001
Educational level	Uneducated	1	0.0-0.28	0.007
	Undergraduate	2	0.03-1.18	0.065
	Graduate	0.6	0.002-1.07	0.056
	Post graduate	0.8	0.0-0.23	
Gender	Female	1		
	Male	3.50	0.84-3.2	0.005
Duration of illness	Weeks	1		
	Months	1.23		
	Years	2.75	.97-2.5	0.001
Age	18-24	1		
	25-34	1.18		
	35-44	1.99		
	45-54	.92		
	55-65	.45	3-4.2	0.005

*Odd Ratio

Table 2

Out of 300 individuals, 216 (75%) were married. Cases and controls were fairly matched on socio demographic variables except on marital status, educational level and monthly income which showed significant difference, (table-1) Main logistic regression for lower self esteem (Table-2) as dependable variable with 95% Confidence Interval (CI) shows that depressed patients had significantly lower self esteem than non depressed population as shown in table-2 (OR, 8.05, 95% CI 3.5-14 and p- value =0.001). Male gender also had lower self esteem (OR=3.50 and p value=0.005). Self-esteem increased with advancing age. Age group 55-65 had the highest level of self esteem (OR, .45.CI, 3-4.2.p value, 0.005) Undergraduates had significantly lower level of self esteem. (OR, 2.CI.03-1.18; having the illness for more than one year, were 2.75 times more likely to have lower self esteem. (OR, 2.75, CI, .97-2.5, p value, 0.001).

DISCUSSION

The association between low self-esteem (LSE) and depressive disorders is well established^{11,12}. Although there is a reciprocal relationship between depression and self-esteem, yet the causal direction of this association is not established. Low self-esteem arises during major depression and depressive subtypes¹³. Low self-esteem also acts as a vulnerability factor for the development of major depression. Changes in either depressive state or self-esteem can affect the other. Improvement of self-esteem, leads to improvement in depression and vice versa¹⁴. We

also found a strong association between low self-esteem and depression. These findings are also supported by results from another study conducted on 300 depressed patients of our hospital which revealed that that LSE was significantly associated with depression (OR =10.01; 95% CI 3.77.4).¹⁵ This is in line with the earlier studies. In non-psychiatric populations, self-esteem is stable over long periods, similar to personality traits. Self-esteem is correlated with age, though the exact relationship is uncertain. Bloom has found a curvilinear relationship between age and self-esteem, where self-esteem reached at its highest level at age 40-49 years.¹⁶ Other researchers have found self-esteem to remain relatively stable or to increase with advancing age.¹⁷⁻¹⁹ We also found a similar pattern. There is a debate about self-esteem being a trait or state. We assumed that if self-esteem was a trait, then we should find low self-esteem in the first-degree relatives of depressed patients. We did find self-esteem to be low in patients of depression but the first-degree relatives did not have low self-esteem. This finding therefore might add to the evidence that low self-esteem is a state, dependent on depression and not a pre-existing trait, at least in our population of the study. In non-psychiatric population males have three times higher self-esteem than females. It is not clear if this difference is due to trait, related with cultural aspects of society, or is a combination of several factors. During the past 30 years, self-esteem of women appears to be decreasing. Many researchers do not believe that gender differences are inherent. The observed

differences could either be due to the way, the parents and teachers train and nurture children, parents' communication with each other, expectations of society about the definition of what makes a successful man or woman, or the different social roles for opposite sexes. Differences based upon gender are likely to diminish as views about women and men's roles are changing²⁰. In our study depressed men were 2.75 times more likely to have lower self-esteem than depressed women. This finding is perhaps the most intriguing as in most of western studies women are more likely to have lower self-esteem. This could be because of loss of manhood in society like ours where men dominate in all spheres of life. In spite of many confounding variables such as age, previous occupational status, and degree of social support, generally, a significant correlation has been found between low self-esteem and unemployment in non-psychiatric population. Similarly, the results of the present study show that employed patients had significantly higher self-esteem compared to unemployed patients. It is possible that employment reflect the effects of financial security, respect, social position, and prestige on the self-esteem of individuals. In psychiatric patients self-esteem is significantly affected by job satisfaction. In our study the employment status is an important factor, which affect the level of self-esteem but is not significant statistically. This could be due to the collectivistic nature of our society. Higher income particularly in women is associated with higher self-esteem.^{21,22} Our findings do not lend strong support to the suggestions that income strongly affects self-esteem in depressed patients. We found significant association between level of self-esteem and duration of the illness. Patients who had depression for more than one year were 3.45 time more likely to have low self-esteem than those whose illness duration was less than one year (table 2). This finding may again point towards our earlier observation that low self-esteem is a state dependent on mood.

Limitations:

This study should be seen in light of following limitations.

- A) The control group was not randomly selected. They were not the primary focus of the psychiatric assessment; hence, the presence of a psychiatric condition may have been overlooked. In spite of that self-esteem was found to be significantly low in depressed patients. Due to the same reason our control group might appear similar to normal control groups of previous studies.
- B) A semi-standardized interview, such as the

SCID (Structured Clinical Interview for DSM-III-R) was not used in the diagnostic process. However interview by qualified and trained psychiatrists may still be taken as gold standard.

- C) Rosenberg self-esteem scale is not validated in Pakistan. Adapted versions of Rosenberg's Self-Esteem Scale has been used by Nargis Sardar in her Ph D thesis²³ and a translated version in Urdu has been used in same Pakistani population.²⁴

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