UNIPOLAR AND BIPOLAR DEPRESSION – A COMPARATIVE STUDY

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Summary

A sample of 112 consecutive series of depressed patients satisfying RDC criteria for major depression was interviewed to compare the sociodemographic and clinical parameters of unipolar and bipolar depressive disorder. Seventy four cases were unipolar and 38 cases were bipolar depressives. Mean age of unipolar and bipolar depressives were 37.54 and 28.66 years respectively. The comparison revealed that first degree family history of mood disorders was found significantly higher in bipolar depression than that of unipolar depression. The bipolar depression was associated with earlier onset, more episode with shorter duration than unipolar depression, there were no significant differences in severity of depression, treatment and its response between two group. Though freqeuency of retardation much higher than agitation and guilt feeling was less frequently expressed in total number of cases, there were no significant differences in symptoms between two group except poor appetite which was more frequent in unipolar depression. The findings support the distinct entities of unipolar depression and bipolar depression.

Key Words : Unipolar and bipolar depression, comparision.

Introduction

Depression is one of the commonest psychiatric disorder in Bangladesh. In a rural community survey the prevalence of 28.78/1000 population was reported[1] Depression was reported to be 34.5% amongst psychiatric patients attendings in psychiatric OPD of IPGM&R and 13.0% and 9.1% of nonorganic cases attending the medical OPD of IPGM&R and a general private practice[2,3].

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The broad definition of manic – depressive psychosis put forward by Kraepelin had been accepted for many years, unit in 1959, Leonherd, mainly on clinical basis, proposed to divide it into separate unipolar and bipolar groups. Angst (1966) and Perris (1966) who first produced convinceing evidences in support of the distinction. Their findings were further confirmed by other investigators. To day, the unipolar and bipolar depression is widely accepted and considered as most useful Classification of depressive disorder.

In Western studies, the prevalence of unipolar depression in the population was reported to be

3.25 and that for bipolar was reported 0.6–0.9%[4,5]. No such dinstinct prevalence study is existing in our country. In a study amongst psychiatric patients attending in OPD of Institute of Mental Health and Research (IMHAR) unipolar and bipolar disorder was reported to be 19.51% and 10.67% respectively[65]. The major discriminating criteria between unipolar and bipolar depression are the first degree relatives of bipolar depression are more likely to become affectively ill than the first degree relative of unipolar depression, the mean age of onset of bipolar disorder (25–29 years) is less than that of unipolar disorder(40–44 years), whereas unipolar depression is twice as common in women as in men, the incidence of bipolar depression is equal and bipolar disorder is associated with some episodes with shorter duration than unipolar depression[7]. Despite a number of claims it is generally agreed that the two groups differ neither in their symptoms nor in their response to treatment (with the possible exception of lithium therapy)[7,8,9].

The aim of the present study was to compare the sociodemographic and clinical parameters of unipolar and bipolar depressive disorder and to confirm the findings of distinction between these two groups of depressive disorder.

Materials and methods

A consecutive series of 112 depressed patients of either sex and any age satisfying RDC criteria for major depression [10] were taken from a private psychaitric consultation centre at Dhaka city during the period from July 1992 to June 1994. Patients who attended for the first time were included in the study. Patients in whom depression was secondary to other disorder were excluded. A semistructured questionnaries which included sociodemographic parameters, psychiatric and family history and information about depressions was used. Informations were collected by interviewing the patients and their relatives by the authors. Unipolar depression was defined when a patient has had at least two episodes of major depressive disorder separated by at least two months of normal functions and had no episode of mania or hypomania, and bipolar depression was denied when a patient has had current episode of major depressive disorder and had one or more episode of mania according to RDC criteria.

The data was processed and comparission was made between the unipolar and bipolar depressive group. Statistical analysis involved two tailed t–test and chi–square tests for significance.

Results

A total of 112 depresed patients were interviewed. Of them, 74 (66.07%) patients were found to have unipolar depression and 38 (33.93%) patients were found bipolar depression.

Table–1 shows the sociodemographic variables. It revealed that their age ranged between 16 and 65 years with a mean of 33.63 (SD – 12.17) years. About 39% cases of unipolar depression fall into 26–35 years age group and 50% cases of bipolar depression fall into the age group of 16–25 years. Mean age of the patients of unipolar and bipolar group were 37.54 and 28.66 years repectively. The difference was statistically significant (P<0.001). Seventy five cases were male and 37 cases were female in total number of cases. The male and female ratio of unipolar and bipolar depression were 1:0.42 and 1:0.65 respectively. Majority of the cases of

Table – I : Comparison on demographic variables

Variable	Unipolar		Bipolar		Total	
	(n=74)	%	(n=38)	%	(n=112)	%
Age (Years)						
16–25	10	13.51	19	50.00	29	25.89
26–35	29	39.19	10	26.32	39	34.82
36–45	17	22.97	07	18.42	24	21.43
56–65	09	12.16	01	02.63	10	08.93
Mean age =	37.54 (SD = 12.05)		28.66 (SD=09.96)		33.63(SD=12.17)	
Sex						
Male	52	70.27	23	60.53	75	66.96
Female	22	29173	15	39.47	37	33.04
M/F ratio =	1:0.42		1:0.65		1:0.49	
Education						
Illiterate	16	21.62	08	21.05	24	21.43
Primary	11	14.86	07	18.42	18	16.07
Secondary	07	09.45	05	13.16	12	10.71
SSC	09	12.16	07	18.42	16	14.29
HSC	10	13.51	05	13.16	15	13.39
Graduate	19	25.68	06	15.79	25	22.32
Postgraduate	02	02.70	00	00.00	02	01.79
Occupation						
Service	18	24.32	05	13.16	23	20.54
Business	13	17.57	04	10.53	17	15.18
Retired	02	02.70	00	00.00	02	01.79
Cultivator	03	04.05	03	07.89	06	05.36
Student	06	08.11	09	23.68	15	13.39
Housewife	22	29.73	10	26.32	32	28.57
Household worker	00	00.00	02	05.26	02	01.79
Self Employed	00	00.00	01	02.63	01	00.89
Unemployed	10	13.51	04	10.53	14	12.50
Social Background						
Rural	32	43.24	19	50.00	51	45.54
Urban	42	56.76	19	50.00	61	54.46
Economic Background						
Higher	06	08.11	03	07.89	09	08.04
Middle	48	64.86	18	47.37	66	58.93
Lower	20	27.03	17	44.74	37	33.03
Marital status						
Married	49	66.22	16	42.10	65	58.04
Unmarried	17	22.97	16	42.10	33	29.46
Divorced	00	00.00	01	02.63	01	00.89
Separated	06	08.11	04	10.53	10	08.93
Widowed	02	02.70	01	02.63	03	02.68

both the group were literate. Among the subjects, 32 were housewives, 23 were service holder, 17 were businessmen, 14 were unemployed and rest were of other occupations. In comparison between two groups, service holders and businessmen were significantly higher in bipolar depression (p<0.001). Of the total cases, urban rural distribution were 61 and 51 cases respectively. There was no significant difference in social background between two group. Sixty six cases were predominantly of middle income group and only 9 cases belonged to higher class in total number of cases. Sixty five cases were married, 33 cases were unmarried and 10,3,1 cases were found to be separated, windowed and divorced respectively. There was higher rate of married patients in unipolar depressives than bipolar depressives with 66.22% and 42.10% of the cases respectively. Unmarried cases were found much more in bipolar group (42.10%) than unipolar group (22.97%). There differences were statistically significant (p<0.001).

Table – II shows the first degree family history of psychiatric illness. The positive family history was found in 25.89% of the total cases. Family history of unipolar disorder was found 14.86% in unipolar depressive and no such history was found in bipolar depressives. The difference here was highly significant (p<0.05). Family history of schizophrenia was found in both the unipolar

and bipolar depressives group with 2.70% and 13.15% respectively. This difference was also significant (p<0.05).

The comparison on vaiables of mood episode of both the group was made and relavent measures are shown in Table–III. The age of onset was 26–35 years of age group in 41.89% cases of unipolar depression and that was 16–25 years age group in 71.05% cases of bipolar depression. The mean age of onset were 33.22 years for unipolar depression and 24.18 years for Bipolar depression. He difference was highly significant.

the unipolar depressive reported a total of 151 past depressive episode with a mean of 1.84. The difference was not significant. When the 63 past manic episodes were included in bipolar disorder group the mean number was increased to a level of 2.97 (SD=1.38) which was significantly higher than that of unipolar depression (P<0.001).

The mean duration of past depressive episode was found to be 7.16 (SD=3.09) months in unipolar depression and that was 6.67 (SD=3.19) months in bipolar depression. The mean duration of presenting episode was found in unipolar and bipolar group with 6.81 (SD=2.76) months and 5.14 (SD=3.17) months respectively. These differences of duration of episode were significant.

Table – II: Comparison of family history of psychiatric illness the first degree relatives.

Family History	Unipolar (n=74)	%	Bipolar (n=38)	%	Total (n=112)	%
Absent	59	79.73	24	63.16	83	74.11
Present	(15)	(20.27)	(14)	(36.84)	(29)	(25.89)
Bipolar	02	02.70	09	23.68	11	09.82
Unipolar	11	14.87	00	00.00	11	09.82
Schizophrenia	02	02.70	05	13.16	07	06.25

Table – III : Comparison on measures of depressive episode.

Measure	Unipolar(n=74)	Bipolar(n=74)	t–test
Age of onset in year	33.22±10.07	24.18±06.25	p<0.001
No. of past episode	02.04±01.17	01.84±01.05	n.s.
Duration of the past episode in month	07.16±03.09	06.67±03.19	p<0.05
Duration of the present episode	06.81±02.76	05.14±03.17	p<0.05

*Data are expressed as X ± SD

Table – IV : Comparison on frequency of depressive symptoms

Symptoms	Unipolar		Bipolar		X^2 Significance
	(n=74)	%	(n=28)	%	
Dysphoric mood	74	100.00	38	100.00	n.s.
poor appetite or weight loss	36	48.65	10	26.32	p<0.001
Increased appetite or weight gain	00	00.00	01	02.63	n.s.
Sleep difficulty	71	95.95	36	94.74	n.s.
Increased sleep	02	02.70	02	05.26	n.s.
Loss of energy	73	98.65	37	97.37	n.s.
Psychomotor retardation	51	68.92	23	60.53	n.s.
Loss of interest or pleasure	74	100.00	38	100.00	n.s.
Feeling of self reproach	34	45.95	15	39.47	n.s.
Decreased ability to think	62	83.78	34	89.47	n.s.
Recurrent thought of death	45	60.81	23	60.53	n.s.

Among the 112 depressed patients, 59 were severe, 50 were moderate and only 3 were mild. In both the unipolar and bipolar group severe form of depressive episode was much higher with 50% and 57.9% respectively than moderate form of depressive episode with 47.30% and 39.47% respectively. The difference of severity between unipolar and bipolar depression was not significant. All he depressed patients were treated with TCAs. In addition, 4.05% cases of unipolar and 7.87% cases of bipolar depression were treated with lithium. ECT was given in 9.45% and 7.87% cases of unipolar and bipolar depression respectively. Of the total 112 cases, responds to treatment were either well or good with 33 and 74 cases respectively. In comparison on the response to treatment, 24.32% cases of unipolar depression and 29.47% cases of bipolar depression responded well. The respond was good in 68.92% and 60.53% cases of unipolar and bipolar depression respectively. There was no signiicant

difference in response to treatment between the two groups.

Table – IV shows the frequency of symptoms of depression as seen in the 112 patients. All the cases had dysphoric mood and loss of interest & pleasure. Psychomotor retaradation was seen in 74 (66.07%) and agitation in 35 (31.29%) cases. Self reproah and recurrent thought of death were found 49 (43.75%) and 68 (60.71%) cases respectively. In comparison between unipolar and bipolar depression on frequency of symptoms, no significant differences were found except poor apetite, which was significant higher in unipolar than bipolar depression with 48.65% and 26.32% cases respectively.

Discussion

The comparison made between unipolar and bipolar depression in the present study revealed a number of differences between two groups. About 66% of the cases were unipolar and 34% of the cases were bipolar depressives. This revealed that unipolar depression was two times more than the bipolar depression. The finding is on the line of prevalence reports of unipolar and bipolar depression where much excess of unipolar depression were observed[4,5]. The finding is also consistent with the report of psychiatric outpatient survey of psychiatric institute at Dhaka where unipolar and bipolar disorder were reported 65% and 35% of the total cases of affective disorder respectively[6].

Sociodemographic information revealed that about 70% were males, 78.59% were literates, majority of the cases were service holder, businessmen or housewives, 58.43% came from middle economic class with 54.46% cases of urban background. These figures were somewhat unusual in comparison with our population. In the report of 1991 population census 51.48% males, 24.9% literates, agriculature–based economic activity in major population and only 19.63% urban population were reported[11]. This inconsistency is obviously due to selective nature of the sample and therefore not representative of the population.

The mean ages of unipolar and bipolar depressives in the present study were 37.54 and 28.66 years respectively. The difference of ages between two groups was highly significant. This findings is similar with the age incidence of unipolar and bipolar depression in the reports of studies which clearly indicated that the mean age of bipolar disorder (40 years)[4,5,7,8]. In both the unipolar and bipolar depression the male cases were found higher than the female cases with the male female ratio of 1:0.42 and 1:0.65 respectively. These findings are inconsistent with the reports of other surveys where male and female ratio in unipolar depression was reported 1: 2–3 and that was 1:1.5 to almost equal in case of bipolar disorder[4,5,7-9]. Smaller number of the women in the sample may be due to the fact that they are less frequently brought for treatment than their male counterpart because of the conservative nature of our society and because our women play subordiante role in the family as well as in the society, and as they are economically dependent. Unipolar disorder was found significantly higher among married. Reversely, bipolar disorder was found significantly higher among unmarried and though no significant, among divorced. The result is consistent with reports of several studies[4,5,7,8].

In our study, significantly higher rate of first degree family history of mood disorder was reported in the bipolar depression than that of

unipolar depression which were 36.84% and 20.27% respectively. This finding is fairly consistent with the reports of the literatures[13-18]. In a Danish report 32 patients of monozygotic twin concordant rate for mainic depressive illness were studied, 11 were concordant for unipolar disorder and 14 concordant for bipolar disorder[17]. In another study on mode of inheritence of affective disorder among 800 first degree relatives, morbidity risk for unipolar depression was reported 12.0% and 11.4% respectively for unipolar depression was reported 12.0% and 11.4% respectively for parents and siblings of probands suffering from unipolar depression and morbidity risk for bipolar disorder for the respective groups of first degree relatives of bipolar probands was reported 15.1% and 16.9% which clearly indicates the contribution of the genetic aetiologial factor in differentiating unipolar and bipolar depression[18].

In the present study, the comparison on clinical variables of depressive episode revealed that mean age of onset for unipolar depression was 33.22 years and that for bipolar depression was 24.18 years which clearly indicated that age of onset of unipolar depression was more later than bipolar depression. The result repoted in the several literatures[4,5,7-9,19]. Unipolar disorders occur most commonly in the 5th and 6th decade. In contrast bipolar disorder are more likely to begin before the age of 30 years more frequently in early 20s[5,7,19].

Though the mean number of depressive episode was insignificantly high in the unipolar depression than that of bipolar depression in the present study, significantly more episode were found in bipolar disorders when total number of mood episode (i.e. mania and depressive episode) was considered. This finding is similar with the reports of imprical surveys[4,7,8]. The mean duration of the depressive episodes was found significantly longer than that of the bipolar depression. This finding is also consistent with the reports of other studies[4,7,8].

In this study, no significant differences was found between unipolar and bipolar depression when severity of depressive episodes, treatment and reponse to treatment were considered. Overall these findings are similar with the analysis of other reports where no consistent differeces were observed in these rergards except lithium therapy[7,8,9].

So far the frequency of symptoms of depression is concerned in the present study, it revealed that overall the frequency of depressive symptoms in our study is consistent with the report of other studies[4,5,7,8,12]. However frequency of certain symptoms was observed different from the reports of Western studies. Of the total number of cases, agitation was seen less than retardation with 43.75% and 66.07% repectively. Similar findings of low percentage of agitation than retardatin were observed in the reports of several Indian studies[20,21]. One of the studies reported reported agitation and retardation 68% and 77% respectively[21]. In our study, self reproach was found in 43.75% cases. This finding is also consistent with the reports of the studies of Bangladesh and India[21,22]. In a study among depressed patients attended in psychiatric OPD of a general hospital in our country, guilt feeling was reported to be 38.7% in endogenous depressive group[22] and that was reported 48% in similar type of hospital survey in India[21]. These findings indicate that frequent retardation than agitation and less incidence of guilt feelings among the depressives in the East might be due to cultural influences. In comparison of frequency of symptoms between

unipolar and bipolar depression, there were no significant differences observed between two groups in our study and only significant difference was found that poor appetite was more frequent in unipolar depression than bipolar depression. These findings are largely consistent with the findings of other reports where no significant difference was reported in symptommatology between unipolar and bipolar depression[7,9]. The smaller part of inconsistency in symptoms between two group which was found in our study may be due to biasness of sample or difference of psychopathology between two groups influenced by the culture.

Conclusion

The present study indicates that unipolar and bipolar depression are distinct entities. The genetic factor and age of onset are the main differentiating factors. There are significant difference in frequency, duration and course of the episode between two groups. The existence of cultural variation of symptomatology between unipolar and bipolar depression and depression as whole need to be explored.

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