PERSONALITY PROFILE, SOCIAL SUPPORT AND PERCEIVED STRESS IN ADJUSTMENT DISORDER PATIENTS

Kavitha Konnakkaparambil Ramakrishnan[1]

[1]*Assistant Professor, Department of Psychiatry, Government Medical College, Thrissur, Kerala.*

ABSTRACT

BACKGROUND

In spite of being one of the commonest diagnoses in clinical practice, very few studies which are exclusively devoted to adjustment disorder have been published. Thus, we decided to study the personality profile, perceived stress and social support among patients diagnosed as having adjustment disorder.

The aim of the study is to study the clinical presentations and frequency of adjustment disorder, to assess the personality dimensions, perceived stress and social support in the patients with adjustment disorders and to compare the data with that of an age and sex-matched control group.

MATERIALS AND METHODS

All patients diagnosed as adjustment disorder were included. M.I.N.I PLUS was the diagnostic tool and data was collected using a semi structured proforma. Perceived Stress scores, Personality profiles and Social Support was assessed and compared with control group.

RESULTS

Overall 40 patients were included in the study. This constituted 7.5% of total outpatient population. Mean age was 25.7 years. Male: female ratio was 1:1.5. 65.7% of the patients presented with suicide attempts. Compared to controls, cases had a significantly higher perceived stress, neuroticism and psychoticism and lower social support. Males had higher perceived stress and lower social support. There was significant negative correlation between social support and perceived stress. Significant positive correlation was found between the psychoticism and perceived stress. Psychoticism was negatively correlated with social support.

CONCLUSION

Patients with adjustment disorder have lower social support, higher perceived stress, neuroticism and psychoticism. Suicidal and non-suicidal patients have similar psychosocial profiles.

KEYWORDS

Adjustment Disorder, Personality Profile, Perceived Stress, Social Support.

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BACKGROUND

Adjustment disorders are one of the commonest diagnoses in psychiatric outpatient settings, but still belong to a grey area of diagnosis– the so-called sub threshold disorders. By definition, the adjustment disorders are characterized by the development of emotional or behavioural symptoms in the context of one or more identified psychosocial stressors. Adjustment disorders are associated with suicide attempts, suicide, excessive substance abuse and somatic complaints.[1] The adjustment disorders have been associated with controversies, but recent criterion validity studies have proven beyond doubt the validity of diagnosis.[2] There have been very few studies in peer-reviewed journals on adjustment disorders and most of the standard textbooks also devote very little space to these disorders.[3] It is the most common psychiatric diagnosis in patients under 30 years admitted with attempted suicide in our hospital.[4]

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Corresponding Author:
Dr. Kavitha Konnakkaparambil Ramakrishnan,
'Dilkhush', Krishna Lane,
North of Karthiayani Temple,
Chembukkavu, Thrissur- 680020, Kerala.
E-mail: drmadhavanvp@gmail.com
DOI: 10.18410/jebmh/2018/90

Aims

1. To study the different clinical presentations and frequency of adjustment disorders in patients attending psychiatry outpatient department (OPD).
2. To study the personality profile of patients presenting with adjustment disorders.
3. To study the levels of social support and perceived stress in patients with adjustment disorder.
4. To compare the personality profiles, social support and perceived stress levels in patients with adjustment disorder with a control group of age and sex matched normal individuals.

MATERIALS AND METHODS

Study population consisted of 40 consecutive patients diagnosed as having adjustment disorder attending the psychiatry OPD at Medical College Hospital Kozhikode.

Inclusion Criteria- All patients fulfilling the DSM IV TR diagnostic criteria for adjustment disorder were included in the study. The study was approved by the Hospital Ethics Committee. Informed consent was taken from the patients and the controls before the study and strict confidentiality ensured.

Exclusion Criteria- Following patients were excluded from the study-

1. Patients with mental retardation.
2. Patients with acute medical and neurological illnesses.
3. Patients who did not give informed consent for the study.

Controls- An age and sex matched control group was used for comparison. The control group was drawn from visitors of hospital inpatients and was free from any psychiatric or serious medical illness. Care was taken to ensure that they were not primary caregivers to any inpatient in the hospital.

Diagnostic Criteria- The Mini-International Neuropsychiatric Interview (M.I.N.I), a structured diagnostic psychiatric interview that has been well validated, was used to arrive at a diagnosis of adjustment disorder.[5] Adjustment disorder is listed in module X of MINI-PLUS and thus all the major psychiatric illnesses were excluded before a diagnosis of adjustment disorder was made. The M.I.N.I-PLUS version-5.0.0 which is compatible with both ICD-10 and DSM-IV diagnosis was used for this study.

Study tools- Stress- Adjustment disorder patients, by definition, should have an identifiable stressor. In this study, we attempted to quantify the levels of stress in various patients rather than trying to identify the type of stressor. For this purpose, we used the Perceived Stress Scale (PSS) which is a tool for measuring the levels of stress.[6] It consists of 10 questions about the subject's thoughts and feelings during the previous three months, the answers being on a 0-4 scale, 0 for never and 4 for very often. Four questions are positive items and have to be reversed before summing up the score. There is no specific cut-off point. Higher the score, higher is the level of stress. The scale has been used in many published studies and has been well validated.[7,8] The scale was translated to Malayalam and independently retranslated to English and the Malayalam version was used for this study.

Personality- The Eysenck Personality Questionnaire was used to measure the personality dimension.[9] It gives a measure of three important personality dimensions viz., Psychoticism, Extroversion and Neuroticism. It contains 90 items answered in a 'yes' or 'no' fashion. 24 items are for psychoticism, 23 for neuroticism, 21 for extroversion and 22 for lie items. The Malayalam version of EPQ which has been previously used and has shown to be having high reliability was used for the present study.

Social Support- The social support scale (SSS) developed by Pollack and Harris is a 19 item questionnaire. The items refer to help, social support concern, reinforcement and criticism which a person gets from his or her family, friends, social acquaintances and working colleagues. Eight items are positively worded and eleven are negatively worded. Each item has four options ranging from no agreement (scored as one) to extreme agreement (scored as four). A higher score indicates that more support is available to the individual. The Malayalam version of the scale that has been used in a study conducted in our department in the past.[10] was used in our study.

Methodology- Sociodemographic data was collected from the patients as well as controls using a specially designed proforma. Then M.I.N.I PLUS was administered to achieve a diagnosis. Once adjustment disorder was diagnosed, patients were administered the Perceived Stress Scale (PSS), Eysenck Personality questionnaire (EPQ) and the Social Support Scale (SSS). Though these scales can be self-administered, in our study, the questionnaires were administered by the interviewer in order to achieve uniformity.

Statistical Analysis- The scores calculated for each patient, and data was analysed on SPSS -10.0 for Windows statistical package. The data was compared between the cases and the controls and also among the cases themselves. Non-parametric tests were used – chi-square McNemar test, Wilcoxon signed rank test, Mann Whitney U test and Spearman correlation were used. P value less than 0.05 was taken as significant.

RESULTS

		Cases n= 40	**Controls n= 40**	**p value**
Mean age		25.7 yrs.	25.7 years	
Male: Female ratio		1:1.5	1:1.5	
Place of origin	Rural	36	32	0.344
	Urban	4	8	
Religion	Hindu	31	22	0.115
	Christian	1	10	
	Muslim	8	8	
Educational status	Primary	9	2	0.001
	High school	23	14	
	College	8	24	

Marital status	Unmarried	21	28	0.167
	Married	19	12	
Type of family	Nuclear	27	32	0.481
	Extended	9	6	
	Joint	4	2	
Caregiver	Spouse	21	12	0.115
	Parent	17	27	
	Others	2	1	
Occupation	Unemployed	15	6	0.442
	Student	10	20	
	Manual labourer	11	7	
	Others	4	7	
Socioeconomic status	Low	35	20	0.001
	Middle	4	18	
	High	1	2	
Family history of suicide	Present	9	1	0.008
	Absent	31	39	
Family history of mental illness	Present	6	1	0.125
	Absent	34	39	

Table 1. Sociodemographic Data

Chi-square Mc Nemar Test- p value <0.05 significant.

Subtypes	Number (% of Cases)
Adjustment disorder with depressed mood	32 (80%)
Adjustment disorder with Anxious mood	6 (15%)
Adjustment disorder with Disturbance of Conduct	1 (2.5%)
Adjustment disorder with Mixed disturbance of emotions and conduct	1 (2.5%)

Table 2. Clinical Subtypes of Adjustment Disorder. (n=40)

		Cases	Controls	p value
PSS	Mean	27.82	15.5	<0.001
	Standard deviation	5.71	5.81	
EPQ P	Mean	6.2	4.7	0.029
	Standard deviation	2.82	2.21	
EPQ E	Mean	12.65	13.95	0.106
	Standard deviation	3.91	3.54	
EPQ N	Mean	17.22	10.87	<0.001
	Standard deviation	4.67	5.42	
EPQ L	Mean	8.75	7.77	0.081
	Standard deviation	1.83	2.10	
SSS	Mean	35.82	50.92	<0.001
	Standard deviation	9.09	7.29	

Table 3. Comparison of Scores Between Cases and Controls

Wilcoxon signed rank test p <0.05 significant.

		PSS	EPQ P	EPQ E	EPQ N	EPQ L	SSS
PSS	Correlation coefficient	1.000	0.411	0.200	0.259	0.010	-.602
	Sig (2 tailed)		0.008	0.215	0.107	0.952	0.000
EPQ P	Correlation coefficient		1.000	0.176	0.393	-0.043	-0.379
	Sig (2 tailed)			0.277	0.012	0.791	0.016
EPQ E	Correlation coefficient			1.000	-0.132	-0.174	0.150
	Sig (2 tailed)				0.417	0.284	0.356
EPQN	Correlation coefficient				1.000	-0.081	-0.305
	Sig (2 tailed)					0.618	0.056
EPQ L	Correlation coefficient					1.000	0.36
	Sig (2 tailed)						0.827
SSS	Correlation coefficient						1.000
	Sig (2 tailed)						

Table 4. Correlation Between PSS, EP Q and SSS Scores among Cases (n=40)

Spearman's rho p <0.05 significant.

		Male	Female	P Value
PSS	Mean	30.25	26.208	0.038
	Standard deviation	5.0531	5.649	
EPQ P	Mean	7.00	5.667	0.110
	Standard deviation	2.3664	3.016	
EPQ E	Mean	11.50	13.4	0.153
	Standard deviation	4.397	3.45	
EPQ N	Mean	17.75	16.87	0.825
	Standard deviation	3.29	5.43	
EPQ L	Mean	8.93	8.62	0.758
	Standard deviation	1.43	2.08	
SSS	Mean	31.93	38.41	0.019
	Standard deviation	7.131	9.46	

Table 5. Psychosocial Measures- Sex Wise in Cases (n=40)

Mann-Whitney U test p<0.05 significant.

		Age	Socioeconomic Status	Education
PSS	Correlation coefficient	0.187	-0.300	-0.235
	Sig (2 tailed)	0.249	0.060	0.144
EPQ P	Correlation coefficient	0.118	-0.208	-0.184
	Sig (2 tailed)	0.467	0.197	0.255
EPQ E	Correlation coefficient	0.243	0.342	0.074
	Sig (2 tailed)	0.131	0.031	0.652
EPQN	Correlation coefficient	0.130	-0.114	-0.025
	Sig (2 tailed)	0.424	0.482	0.880
EPQ L	Correlation coefficient	-0.016	-0.231	0.218
	Sig (2 tailed)	0.923	0.151	0.177
SSS	Correlation coefficient	-.286	0.334	0.462
	Sig (2 tailed)	0.074	0.035	0.003

Table 6. Correlation between Age, Socioeconomic Status, Education and Psychosocial Measures among Cases (n=40)

Spearman's rho p <0.05 significant.

		Suicide attempters n=27	Non Suicidal Patients n=13	p value
PSS	Mean	28.40	26.6	0.284
	Standard deviation	5.73	5.70	
EPQ P	Mean	5.9	2.8	0.408
	Standard deviation	2.87	2.74	
EPQ E	Mean	13.4	11.1	0.061
	Standard deviation	4.09	3.09	
EPQ N	Mean	17.3	17.0	0.761
	Standard deviation	4.14	5.80	
EPQ L	Mean	8.6	8.9	0.781
	Standard deviation	1.96	1.60	
SSS	Mean	35.33	36.84	0.583
	Standard deviation	9.22	9.09	

Table 7. Comparison Between Suicide Attempters and Nonsuicide Adjustment Disorder Patients

Mann-Whitney U test p <0. 05 significant.

RESULTS

Overall 40 patients with adjustment disorder were included in the study. This constituted 7.5% of total new patients attending the psychiatry OPD during the study period. 90% of the patients were referred from other specialities while 10% came directly to psychiatry OP.

Male: Female ratio was 1:1.5. Mean age of the patients was 25.7 years. There was no significant difference between the cases and controls in place of origin (Rural Vs Urban), religion, occupational status, marital status and family type. Relation of the care giver to the subject was also not statistically significant. However, there was significant difference in educational status and socioeconomic status of the patients and controls. The cases had a significantly higher chance of having a family history of suicide p value = 0.008. The family history of mental illness was also more in the cases, but this difference did not reach significant levels (p = 0.125) (Table 1). 67.5% of the patients presented with attempted suicide, while 32.5% presented with multiple somatic symptoms in which organic illnesses were excluded. The frequencies of various clinical subtypes of adjustment disorder are given in Table 2. Majority of the patients (80%) had adjustment disorder with depressed mood.

Perceived stress levels were quite expectedly higher in the cases (Mean 27.82. SD 5.71) compared to controls (Mean 15.5, SD 5.8). This difference was highly significant (p value <0.001). With regard to personality scores the results show that both psychoticism and neuroticism levels were significantly higher in the cases, the difference being more marked in the mean neuroticism scores. There was no significant difference between cases and controls in the extroversion and Lie scale scores. Social support received by the patients was significantly lower. Mean Social Support Scale score of cases was 35.82 while that of controls was 50.92 (p value <0.001) (Table 3).

There was significant positive correlation between Perceived Stress Scale score and psychoticism levels (p value .008) but not with other dimensions of personality. Perceived stress also showed strong negative correlation with social support (p value <0.001). Social support also showed significant negative correlation with psychoticism levels (Table 4).

Among the cases, males had a significantly higher PSS score (p value =.038) as well as lower social support (p value=0.01) (Table 5). Social support was significantly lower in lower socioeconomic status patients (p value =0.035) and also in less educated patients (p value =0.003). There was also significant positive correlation between socioeconomic status and EPQE (p value = 0.031). There was no significant correlation between any other demographic variables and the scores (Table 6).

We also compared the suicide attempters and non-suicidal adjustment disorder patients. There was no significant difference between these two groups in any of the measures (Table 7).

DISCUSSION

Adjustment disorder is a diagnosis widely used in clinical practice, but seldom focus of research. It is often considered to be a non-stigmatizing diagnosis which can be applied to many patients with transient psychiatric symptoms in the background of stress.[11] The definition of adjustment disorder has evolved over time.[1] In DSM II it was labelled transient situational disturbance and the term adjustment disorder was introduced in DSM III. DSM IV defined adjustment disorders by the development of emotional or behavioural symptoms in response to an identifiable stressor or stressors occurring within 3 months of the stressor event. It was expected that after the termination of the stressor symptoms persist for not more than 6 months.[1]

This study was done in this Department of Psychiatry at a Tertiary Care Referral Hospital. Our patients belonged to two groups based on clinical presentation: the suicidal group and non-suicidal group. 67.5% of our patients were in the suicidal group and 32.5% of patients were in the non-suicidal group. This is in contrast to the results of an available study comparing suicidal and non-suicidal adjustment disorder patients.[12] which shows 25% of adolescents diagnosed as adjustment disorder as having suicidal attempts or ideas or threats. This difference could be due to the difference in the age group of our patients as well as due to the pattern of referral in our OP from other specialities. The presence of a suicide prevention clinic could have encouraged more patients with suicide attempts to be referred to the psychiatrist. A previous study from our department among suicide attempters had shown that adjustment disorder was the commonest diagnosis in patients below 30 years.[4] A study from Vellore also showed that adjustment disorder was the commonest psychiatric diagnosis in attempted suicide patients.[13]

Mean age of our patients was 25.7 years. The male: female ratio was 1.5:1. This female preponderance is consistent with the published data from Western Psychiatry Institute in which male: female ratio was 1:2.[11] Prevalence of adjustment disorder was 7.5% in an outpatient population. The prevalence estimates of adjustment disorder in literature have shown wide variation from 2.3% to 21 or more of outpatient population.[14]

Among the subtypes of adjustment disorders the most common was adjustment disorder with depressed mood (80%). This is consistent with data from published studies which show that 50-76% of adjustment disorder patients had depressed mood.[11] We had chosen a set of healthy age and sex matched controls. These controls did not significantly differ from the cases with regard to socio demographic profile except for socioeconomic status and education status. More controls belonged to middle socioeconomic status and were of a better educational level. We found during the course of the study that more educated people understood the study method well and agreed readily to serve as controls. This could have been the reason for the difference in socioeconomic status and educational level.

We found that a family history of suicide was significantly more likely in the adjustment disorder patients rather than controls. Family history of mental illness also was more in these patients though this was not statistically significant. These findings are quite reasonable considering the larger percentage of adjustment disorder patients with suicidal attempts in our study. Studies in suicide attempters have shown a higher family history of suicides as well as mental illnesses.[4]

Perceived stress levels measured by us was definitely higher in cases compared to controls (p value <0.001). This is in fact quite natural considering that by definition adjustment disorder had a stressor as aetiological factor. Psychoticism has been mentioned as an independent dimension which describes the personality as solitary, troublesome, lacking in feeling and empathy, hostile to others, while Neuroticism refers to the general emotional liability of a person, his emotional over responsiveness and his liability to neurotic breakdown under stress. Both these were higher in the patients rather than controls. This proves that adjustment disorder patients are having definite personality profiles which make them apparently suffer from more stress and be liable to breakdown under stress. This is a fact which has hitherto been not examined in studies and merits further exploration.

The social support received by the patients was significantly lesser than that of the controls (p value <0.001)

(Table 3). Thus, it turns out that our sample of adjustment disorder patients need more support in the society for tackling various stressors in their life. Social support has been found to be a modifier of adjustment to bereavement in older adults.[15] Social support also has been shown to predict the response to group therapy for complicated grief.[16] However in a study comparing adjustment disorder with depressed mood with major depression and healthy controls, social support was similar in all the three groups.[17]

Correlating the various psychosocial measures in the patients alone (n=40). Our study found significant positive correlation between perceived stress and the psychoticism levels. Thus psychoticism may be much more a risk factor for developing stress rather than neuroticism. This high stress could also be explained by the fact that psychoticism in fact has a negative correlation with social support. This could be a reflection of the psychoticism personality which is described as solitary, troublesome and hostile to others.[18]

Perceived stress negatively correlated with social support. Thus, lower the social support higher was the perceived stress (Table 4). Social support has a buffering effect on the stress.[19] and lack of this may lead to increased stress.

We find from our study that mean social support score was lower and perceived stress score was higher in male patients compared to females. Social support was also lower among the lower socio-economic class patients and in the less educated patients. These findings are difficult to explain from the available data and may need further explanation from more detailed studies.

Finally, we compared the suicidal adjustment disorder patients and non-suicidal adjustment disorder patients. There was no significant difference between the two groups in any of the psychosocial measures (Table 7). Thus, it is evident that adjustment disorders patients as such suffer from the same perceived stress levels, have similar social support and personality profile irrespective of the type of presentation.

CONCLUSION

Our study shows that patients with adjustment disorder have a higher perceived stress, lower levels of social support and higher degree of neuroticism and psychoticism compared to controls. Family history of suicide was significantly higher in the cases compared to controls. Males had comparatively higher perceived stress and lower social support. The levels of social support correlated negatively with perceived stress and psychoticism among the patients. There was no statistically significant difference between suicidal adjustment disorder patients with non-suicidal adjustment disorder patients in any of the psychosocial measures.

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