



PARENTING STYLES IN SCHIZOPHRENIA PATIENTS- A CASE-CONTROL STUDY

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KEYWORDS :

INTRODUCTION

Attachment refers to the universal emotional bond, first arising between infant and primary caregiver, which involves the seeking out of a specific attachment figure in times of stress, and the use of this figure as a secure base in the exploration of the world (Ainsworth et al, 1978). The concept of attachment – whether secure or insecure – has cognitive, emotional and behavioral components. Studies examining adult attachment and psychopathology have found greater insecurity in psychiatric populations compared with healthy controls. Van Ijzendoorn, et al (1996) meta-analysis of 33 studies of clinical and nonclinical groups revealed a strong overrepresentation of insecure attachment styles in psychiatric in-patients, adults with depression, dysthymia, and conduct disorder, and children with oppositional disorder. Fonagy et al. (1996) found that in patients with affective disorders, anxiety disorders, substance abuse, eating disorders and personality disorders had a higher proportion of insecure attachment styles than a matched control group. Other studies have shown association between depression (West, et al, 1998; Bifulco, et al.2002), agoraphobia (De Ruiter & Van Ijzendoorn, 1992), personality disorders (Sperling, et al, 1991; Brennan and Shaver, 1998), eating disorders (Evans and Wertheim, 1998) and post-traumatic stress symptoms (Muller et al, 2000). A study by Nickell et al, (2002) revealed that insecure attachment and perception of lack of maternal care were associated with borderline features. Burge et al. (1997) discovered not only a concurrent statistical association between attachment security and psychiatric Symptoms in young adults, but also found that insecurity in symptomatic individuals predicted symptomatology 1 year later.

There has been no study on Indian population which has shown concurrent association of attachment security, recollection of early parental interactions and psychopathology in adult with schizophrenia as compared with healthy controls.

METHODOLOGY

This study was conducted in the psychiatric inpatient wards of the Katihar Medical College with the aim of examining concurrent role and associations of attachment security, psychopathology and parental bonding, in adults with schizophrenia, in comparison with healthy controls. In this study 50 patients (25 male and 25 female) with schizophrenia meeting inclusion-Exclusion criteria of this study were taken up for purpose of study in each group. They were assessed on Positive and Negative syndrome scale (PANSS), Adult attachment Scale (AAS), and Parental Bonding Instrument (PBI) at the time of admission and again after 6 weeks. 50 Healthy control were identified by using General health Questioners (GHQ-12), and were assessed once by Adult attachment Scale (AAS), Parental Bonding Instrument (PBI).

Comparison of Parental bonding instrument (PBI) and Adult Attachment scale (AA) scale scores between the groups at baseline (0 week).

Variables		Patient (N=50) Mean (± SD)	Control (N=50) Mean (±SD)	t	df	p value
PBI	Care Father	11.86(±7.71)	22.38(±7.74)	-6.802	98	0.000**
	Overprotection Father	24.82(±6.72)	15.14(±5.59)	7.827	98	0.000**
	Care mother	19.32(±7.99)	26.64(±6.14)	-5.133	98	0.000**
	Overprotection mother	20.72(±6.58)	13.76(±3.96)	6.436	98	0.000**
AA	Scale secure	17.16(±2.71)	18.68(±3.75)	-2.322	98	0.005*
	Scale avoidant	20.72(±2.51)	16.78(±3.89)	6.017	98	0.000**
	Scale ambivalent	18.26(±2.80)	14.86(±3.41)	5.438	98	0.000**

* p value significant at <0.05

** p value significant at <0.001

Table shows the comparison of the scores obtained on various subscales of PBI and AA scales between the patient and the control groups at the baseline. Independent samples t-test was applied for comparison of the means of the scores. There were highly significant differences between the scores of all the subscales of both the instruments (p<0.001). The individuals of control group had higher mean scores in care subscale for father (22.38±7.74), than the patients (11.86±7.71); Similarly, the individuals of control group scored higher than the patients in PBI overprotection subscale for father (mean for case group =11.86±7.71; mean for control group=15.14±5.59) and PBI care for mother (mean for case group =19.32±7.99; mean for control group=26.64±6.14). PBI overprotection for mother on the other hand was more in the case group (mean=20.72±6.58) than the control group (mean=13.76±3.96). In the AA subscales, the control group scored more for security (mean =18.68±3.75), than the case group (mean=17.16±2.71) where as for AA subscale of avoidance case group scored more (mean=20.72±2.51); than the control group (mean =16.78±3.89). Similarly, AA subscale of ambivalence the score was more for the case group (mean=18.26±2.80) than the control group (mean=14.86±3.41).

Comparison of Parental bonding instrument (PBI), Adult Attachment scale (AA) scores between the groups at 6 weeks.

Variable	Case (N=50) (Mean ± SD)	Control (N=50) (Mean ± SD)	t	df	p value
PBI Care father	17.48(±7.06)	22.38(±7.74)	-3.30	98	0.001**

	Overprotectio n father	18.70(±5. 71)	15.14(±5. 59)	3.147	98	0.002**
	Care mother	24.72(±5. 67)	26.64(±6. 14)	-1.624	98	0.108
	Overprotectio n mother	14.78(±4. 14)	13.76(±3. 96)	1.258	98	0.212
A	Scale secure	17.54(±2. 62)	18.68(±3. 75)	-1.761	98	0.082
A	Scale avoidant	19.0(±2.6 1)	16.78(±3. 89)	3.346	98	0.001**
	Scale ambivalent	18.68(±2. 26)	14.86(±3. 41)	6.591	98	0.000**

* p value significant at <0.05

**p value significant at <0.001

Table shows the comparison of the scores obtained on various subscales of PBI and AA scales between the patient and the control groups after 6 weeks of the initial assessment. In the PBI scale, care and overprotection subscales are shown for both father and mother. In the AA scale, scores obtained in the security, avoidant and ambivalent subscales are shown. Independent samples t-test was applied for comparison of the means of the scores. Highly significant differences were found for the variables of ambivalence and avoidance subscales of AA scale and PBI subscale of care for father. Significant differences were found for the subscales of PBI overprotection. In the AA ambivalence subscale, the mean of case group was higher (mean=18.68±2.26) than mean for control group (14.86±3.41). Similarly, for avoidance subscales, the case group had higher mean values (19.0±2.61) than mean for control group (16.78±3.89) of AA scale. In the PBI subscale of care for father the mean for control group (22.38±7.74) was more than the mean for case group (17.48±7.06). Significant difference (P=0.002) was also found for PBI subscale of overprotection scores for father, where the case group had higher means (18.70±5.71) than the control group (15.14±5.59). Trend towards significance was found for the AA subscale of security (p=0.082). No significant differences were found for the PBI care and overprotection subscales.

DISCUSSION

Regarding the comparison scores of subscales of PBI and AA scales of the groups at the baseline (0 week), In the parental bonding instrument subscales, highly significant differences were found in the scores obtained in the care and overprotection subscales in both paternal and maternal domains. This difference was due to considerable difference in magnitude of scores obtained in the patients group in all of these subscales. These findings are in accordance with the Favaretto et al (1997) who found that in Schizophrenic patients, the predominant parenting style was affectionless control type. Our findings of considerably low care is similar to the affectionless style and overprotection is similar to the control style observed in their study. Findings of this study can be more directly correlated with the Margareth et al (2002) study. As mentioned above, their study reported that patients of Schizophrenia reported of significantly less care and significantly more overprotection in the mother's style of parenting as compared to normal controls. Similar results have been found when the parental bonding was assessed using other instruments (Mc Creadie et al, 1994; Byrne et al, 1997; Buckhardt et al, 2007). These findings collectively point towards a possible role of parental bonding in development of Schizophrenia. However, a direct association is still lacking. This association can only be established if the role of parental bonding is established in the biological pathogenesis of Schizophrenia. Surprisingly, much fewer studies have been conducted in this line of thought. As mentioned above, there have been only few studies which correlate the bonding patterns with biological variables like sleep and HPA axis. We propose that more vigorous search biological correlates of parental bonding needs to be done to clarify the role of its abnormalities in pathogenesis of Schizophrenia. The scores of attachment subscales of security, ambivalence and avoidance in the patient and normal

control groups at the baseline showed significantly higher scores in the subscales of avoidance and ambivalence in the patient group (19.0±2.61 and 18.68±2.26 respectively) as compared to the control group (14.86±3.41 and 16.78±3.89 respectively). On the other hand, significantly low scores were obtained in the patient group in the security domain (17.54±2.62) as compared to the control group (18.68±3.75). These findings are in accordance with the study of Burkhardt et al, (2007) who found that in Schizophrenic patients, ambivalence was more commonly encountered in the parental attachments. Similar results have been presented by various studies who have studied the parental and peer attachments by various other instruments (Yoo et al, 2006; Ruth et al, 1996; Zeichowsky et al, 2004). These all have found that there are clear associations of the insecure and avoidant-ambivalent parental attachments with presence of Schizophrenia or schizophrenia like paranoid symptoms. However, how such an attachment pattern leads to Schizophrenia symptoms is still a matter of debate. Some investigators have postulated that the parents who are preoccupied rather than expressive in their emotions, are more likely to have children with internalised symptoms (symptoms related to thoughts) because they are not able to convey the meaning of externalisation of their thoughts or other psychological events. This preoccupation by family members is manifested as the insecure-attachment pattern in instruments and as schizophrenia like psychological symptoms in patients (Yoo et al, 2006; Ruth et al, 1996; Sarason et al, 1987). Still some others have suggested that children facing more of avoidant and ambivalent traits in their parents developed a tendency to alienate their surroundings and withdrawing into themselves (Ainsworth, 1978; Crittendon, 1988; Hesse and Main, 1999). Thus as they develop, they also alienate their peers and other environmental factors to get too much involved with their own psychological world. This alienation thus subsequently acts as a perpetuating factor in the development of Schizophrenia like symptoms where the person alienates himself from the whole of society (Zeikowsky et al, 2004). However, these constructs still need to be proved on more objective findings, for which, further studies are definitely warranted in this field.

As mentioned before, application of PBI and AA scales in the patient and control groups and their comparisons using the independent samples t-test after 6 weeks of initial assessment was done with the intention to assess the scores of family bonding and attachment instruments after the resolution of psychopathology. As can be seen, although the scores were different from the baseline in all the domains, still the pattern of scores and differences between the groups were same as found in the baseline condition, in the sense that the scores of PBI were low in the domains of care and high in domain of overprotection for both parents as compared to controls. On the other hand, the scores in security subscales were low and of ambivalence and avoidance were high as compared to the control group, similar to baseline patterns. These findings represent that inspite of improvement in psychopathology scales, the bonding and attachment views of patients for their parents were the same, involving decreased security and care and increased avoidance, ambivalence and overprotection in the patient as compared to the control group.

Regarding the comparison of scores of various scales at 0 and 6 weeks, significant difference was found in all domains except for the AA subscale of ambivalence and AA subscale of security. Decrease in PANSS subscale scores of positive, negative and general psychopathology symptoms represents the improvement in psychopathology. In the PBI scores, there has been an increase in PBI scores of care subscale in both parental domains and decrease in PBI scores in overprotection subscale.

In our study, no significant correlations were found between the scores of PBI and AA and the age of patient, age of onset of illness and duration of untreated illness. These results indicate that the scores of PBI and AA are not related to the present age, duration of illness, age of onset or duration of untreated psychosis.

CONCLUSIONS

From the study, following conclusions can be derived:

- Schizophrenic patients tend to be unmarried and having joint family as compared to the controls.
- Parents of Schizophrenic patients show less care and more overprotection as compared to the control group.
- The parental attachment patterns of Schizophrenia patients have more of ambivalence and avoidance and less security as compared to the controls.
- The pattern of parental bonding and attachment remain same even after treatment of Schizophrenic patients for a considerable duration of time. Probably this shows that the bonding and attachment status is independent of the psychopathology of patients.
- There is a strong negative correlation between care of parenting and overprotection by parents as well as of the avoidance in attachment by parents.

REFERENCES

1. Ainsworth, M., Blehar, M.C., Walters, E., Wall, S. (1978). Patterns of attachment: a psychological study of the strange situation New Jersey: Lawrence Erlbaum.
2. Fonagy, P., Steele, M., Steele, H. (1991). Intergenerational patterns of attachment: Maternal representations during pregnancy and subsequent infant- mother attachments. *Child Development*, 62, 891-905
3. Margareth, I., Helgeland, W., Torgersen, S. (2002). Maternal Representations of Patients with Schizophrenia as Measured by the Parental Bonding Instrument
4. McCreadie, R.G., Williamson, D.J., Athawes, R.W., Connolly, M.A., Tilak-Singh, D. (1994). The Nithsdale Schizophrenia Surveys. XIII. Parental rearing patterns, current symptomatology and relatives' expressed emotion. *British Journal of Psychiatry*, 165(3), 347-352.
5. Crittenden, P.M. (1983). The effect of mandatory protective daycare on mutual attachment in maltreating mother-infant dyads. *Child Abuse and Neglect*, 7, 297-300.
6. Zechowski, C., Bazyńska, K., Namysowska, I., Bronowska, Z., Siewierska, A., Jakubczyk, A. (2004). Parental and peer attachment of hospitalized adolescent patients—pilot study. *Psychiatry Research*, 38(5), 933-945.
7. Yoo, H.I., Kim, B.N., Shin, M.S., Cho, S.C., Hong, K.E. (2006). Parental attachment and its impact on the development of psychiatric manifestations in school-aged children. *Psychopathology*, 39(4), 165-74.
8. Burkhardt, A., Rudolf, S., Brand, C., Rockstroh, B., Studer, K., Lettke, F., Lüscher, K. (2007). Ambivalences in the relationship of parents towards their schizophrenic or substance dependent adult child: a comparison to their relationships with healthy siblings and to ordinary parent-child-relationships. *PsychiatrPrax*, 34(5), 230-238.