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Comorbidity between Borderline Personality Disorder (BPD) and Attention Deficit Hyperactivity Disorder (ADHD) among Adults: A Cross Cultural Comparison between India and Kuwait

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Abstract A study conducted on two different samples of already diagnosed Borderline Personality Disorder (30 each) from two different countries (India & Kuwait) to examine the comorbidity between Borderline Personality Disorder (BPD) and Adult Attention Deficit Hyperactivity Disorder. Clinical Anger, Impulsivity and Affective disorder are common symptoms shared by both the disorders. SPSS, Quantitative and Qualitative analyses are made.

Keywords: *Borderline Personality Disorder, attention deficit hyperactivity disorder, Clinical anger, impulsivity, Affective disorder, correlation matrix, Multiple Regression, case histories,symptoms*

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1. Introduction

Borderline Personality Disorder (BPD) is personality disorder characterized by conflicting self-image, interpersonal problems, affective instability, impulsive behaviors, explosive angry outbursts, paranoid ideation, dissociation, everlasting sense of emptiness, easy manipulation, and social ineffectiveness and poor self - esteem. It is a very conflicted and ambivalent personality disorder, feels abandoned by others thus constantly manipulating to get accepted. Such personalities have long- standing and maladaptive pattern of perceiving and responding to other people and to stressful circumstances. Such maladaptive patterns are the result of dysfunctional, invalidating and abusive early environments that prevent the evolution of adaptive patterns of perception, response and defense. Attention Deficit Hyperactive Disorder (ADHD) is a neurobehavioral disorder categorized in three main symptoms: reduced attention, impulsivity and hyperactivity. Besides that social ineffectiveness, interpersonal problems low self – esteem, marital conflicts, and irrational and unrealistic thinking pattern. ADHD strongly influences how one perceives oneself, as well as one's sense of worth since pride and shame in adulthood are strongly determined by how one perceived oneself in childhood and adolescence. ADHD affects functioning in all roles of adult life, as a spouse, parent and worker.

The objective of the present investigation is to justify scientifically the relationship between these two disorders in order to include the treatment strategies of ADHD in the main treatment protocols of BPD and to further check whether cultural differences affect the symptomatology and co morbidity of these two disorders. Taking up further from this point the present investigation is focused on detecting the formal and researched proved relationship between these two major disorders. Clinical anger, Affective instability and impulsiveness are the three main symptoms, as shared by these two major disorders are measured to conceptualize the co morbidity between them.

Based on the above objectives the hypothesis formulated are: there is significant existence of co morbidity of BPD and ADHD in India and Kuwait, significant differences between these two cultures in regard to co morbidity, significant occurrence of anger, affective instability and Impulsiveness as commonly shared by BPD and ADHD adults of India and Kuwait and significant differences between two cultures on the grounds of common symptoms. The total sample suggested for research is a total of 60 already diagnosed BPD cases; 30 from each country aging between 20- 35 years.

Keeping the design in mind the data collection is carried out, with the help of the standardized scales; BPD- Structured Clinical Personality questionnaire and Clinical Interview (SCID), ADHD – Wender Utah Rating Scale (WURS), Anger – Clinical anger scale (CAS), Impulsivity – Bharratt's impulsiveness scale (BIS-II) and Affective instability - Mood Survey (MS) in two phases, the first phase focused on screening out the BPD+ADHD patients of the required age of the sample. This sample is obtained

through application of the SCID-II to detect BPD and WURS to get the ADHD data. In the second phase the sample of 60 BPD+ADHD are further measured on the three variables: Clinical anger, impulsivity, and affective instability.

In order to compute and analyze the data collected from both the countries in order to justify the proposed hypothesis and achieve the objective the present research, SPSS is mainly used.

Analyzing a Borderline personality disorder (BPD) in terms of the score or numbers is not enough rather every BPD has an individual story with individual features. We have cited two case histories from each culture. Although the cases tested can be categorized under the same umbrella of diagnosis, but still there is lot more specific to each case of BPD. Therefore few cases are selected to explain the qualitative similarities and differences between two cultures i.e. India and Kuwait. The results are discussed keeping in view the rationale,

2. Case Histories

Two case histories randomly selected from each group of the sample under the study are presented to supplement our results. Although each case history is unique in terms of symptoms and etiology, still there are lots of similarities between them.

2.1. Case History

Mr. S, 48 years old male an Indian sample, referred by his wife for marital problems due to his angry outbursts, aggressive and hypersensitive attitude, mood swings, inability to handle relationships, paranoid ideation, extra marital affairs, unhealthy sexual habits and unnecessary spending. In addition, he often conflicted between identity and no identity and a strong fear of abandonment from his wife. “I wish I never had her in my life; still I cannot do without her.” Because he was abandoned by his mother in his childhood and often unjustified between his siblings, he started running away from home, manipulating at a very early age in order to stay with his godmother. Frequent physical punishments, verbal abuse reinforced his belief of unlovability.

As stated by Grove (1981) childhood intolerance for separating and the resultant anxiety and depression about abandonment continues into adulthood for the borderline person.

Further quoted by Zetzel (1971) the inability of the Borderline person to develop a clear distinction between self and the object-image, coupled with the failure to master separation and thereby internalize a healthy ego leaves them vulnerable to periods of identity disturbance.

Mr. S’s school history was loaded with behavioral problems, long absences and inappropriate approaches to his teacher, regular punishments from school as well as at home eventually resulted in expulsion from the school. Although bright, but never performed well. His profile showed a good range of symptoms of Oppositional Defiant Disorder and Attention deficit Hyperactivity disorder. Smoking, drinking started at the age of 13 years when he finally left his house for good. His hyperactivity and impulsivity carried on to adulthood, quite obvious from frequent change of jobs, impulsive financial investments, which resulted in heavy loss. His angry outbursts and lack of healthy social skills play a big role in his failures. Mr. S. married at the age of 40, after breaking up with three females.

Professionally he is good at his work that keeps him surviving, although often complained of verbal abuse and angry outbursts by senior as well as junior staff. Basically he is well informed and well-read in religion, art, photography and music. This is a general observation that such patients are very smart, charming and quite well informed. Despite intellectual or creative abilities which suggest an ability to function better, BPD have functional histories filled with rapid shifts, repeated flights and failures. (Gunderson 1987).

His physical profile shows chronic diabetes, hypertension and cardiac problems, which are at times used to control his family emotionally. In case of no compliance from his mother & wife or his friends he would stop taking medicines. Immature behaviors, temper tantrums, demanding undue attention and power struggle are noticed. “I hate you…. Don’t leave me,” quoted for a BPD reflects his personality.

Clinging, dependency, devaluation and manipulation characterize and cause the intensity of affect and instability of persons with BPD. The most distinctive feature of the clinging dependency is that the dependency reflects an expressed wish for an exclusive relationship with the other person and that – while it is evident to outsiders – this dependency is denied by the borderline patients themselves. Devaluation refers to the tendency to discredit or undermine the strengths and personal significance of important others and often emerges as an expression of anger in response to separations, limits or confrontations. Manipulative behaviors that use covert means to control or gain support from significant others are likely to arise under similar circumstances. (Gunderson 1987).

Borderline persons have sustained and conscious apprehensions that those on whom they feel dependent will desert them, thus they tend to be compulsively social to avoid such experiences. Many cases tested during the present study expressed such ambivalent social likes.

Mr. A, 48 years old, from Kuwaiti sample approached as ex- military personnel, retired and works as farmer. He is brought into attention through his son, who drew him as a dictator in his art project. To psychologist he is referred by his wife for excessive angry outbursts, physically violent to wife and children, extreme mood fluctuations ranging from complete silence; getting locked in room for weeks, a complete avoidance to everybody with non-existential attitude; to excessive aggressiveness to family as well as staff at farm. Unhealthy and illegal sexual relations, sexual exploitation of his own children are the main features of his impulsive behaviors. His wife is too conflicted of his behavior; his excessive dependency as well as his constant sexual and physical abuse of her and the children. Brought up in an authoritarian family in a military – disciplined environment with very little freedom of thought & expressions, exposed to constant physical and emotional tortures, eventually resulted in a very conflicted personality. Borderline Personality disorder is the border between psychoses and neuroses well defined in this case history. His professional history is highlighted with frequent change in different

departments, physical punishments (quite inhuman in nature), repeated failures, and frequent fights with colleagues and authorities.

His physical profile demonstrates chronic diabetes, hypertension and skin infections. Intake of medicine depends on the unconditional compliance of his wife.

In addition, he is diagnosed with Major depression due to recurrent episodes, adjustment disorder and attention deficit hyperactivity disorder.

2.2. Case History

Another case, Mr. H, a 27 years old male, from Kuwaiti sample graduate in Military science, working as Military personnel, is referred by mother for drug abuse, angry outbursts, sleep problems, self-mutilating acts, and intense mood swings suicidal attempts, violent and destructive behaviors towards self and others. His mood variations are quite intense and well defined: when depressed; totally withdrawn, silent, self-talking, self-mutilating, excessively crying, talking to god: "Help me out I am sinking"; and when elated: hyperactive, agitated, and aggressive. He had attempted suicide twice and saved by his parents. Socially he is very ineffective, has very short casual relationships including his family. Huge problems of identity, low self-esteem, inferiority complex and strong jealousy are easily evident from his profile.

His school history, as reported by his mother is filled with symptoms of ADHD: short attention span, difficulties concentrating, fidgeting, and restlessness, impulsive behaviors, truancy, angry outbursts, and frequent fights.

Mother is a very sensitive and nervous person. Father being an authoritarian could never have relations with him. His elder brother was always the main target of his jealousy since he excelled academically and got a chance to study in USA. He was always looked down because of his behavioral problems. He often stated, "Nobody understands me." He never received any professional help for his ADHD and behavioral problems. He was often a reason for embarrassment in social gatherings thus was often punished which aggravated his aggressive behavior.

He started drinking at the age of 13 years, sneaking into father's bar and would steal some drink. This often happened whenever he was locked in the house as punishment.

The substance abuse pattern for borderline patients tends to be episodic, without a favored or stable drug preference... rapid flight from stressful situations is common. Mr. H started with alcohol, slowly moved to drugs, initially hashish and then to Rophynol pills (6-8 pills) in beer and alcohol to be high in the social gatherings. Mr. G., 27 years old Indian sample has similar comments about his drug intake.

Professionally a similar trend is noticed, in spite of being bright and good at work often had problems due to his angry outbursts and verbal abuse of his higher authorities and colleagues. This is in line with what Linehan (1993) has to say about BPD, a way being in the world that involves massive mood fluctuations, intense relationships, desperation and insecurity. BPD is a condition that has its origins in both biology and the environment.

The inability to regulate emotional arousal also interferes with the development and maintenance of a sense of self. Generally one's sense of self is formed by observations of self and of others, reactions to one's actions, well supported by the cases mentioned in this chapter.

Unpredictable emotional lability leads to unpredictable behavior and cognitive inconsistency and consequently interferes with identity development. Emotional regulation difficulties interfere with a stable sense of self and with normal emotional expression. Without such capabilities, it is understandable that borderline individuals develop chaotic relationships.

Linehan (1993) postulated that in addition to being biologically environments "in which communication of private experiences is met by erratic, inappropriate, and extreme responses. In other words, the expression of private experiences is not validated; instead, it is often punished and/or trivialized." Most of the patients from both the cultures are the targets of such invalidating environments, sexual traumas in their lives and often punished by immediate families or went under religious trials for being captured by evil powers.

Adler and Buie (1979) emphasized the failure of parents to provide adequate attention to and validation for the child's feelings and experience. Such parental deprivation results in the child's failure to develop a positive and stable sense of self and in the child's need of ongoing external supports to feel acceptable. A good percentage of the total sample has come up from such disrupted and invalidating environment. The following case from Indian sample supports the comments of Adler and Buie.

2.3. Case History

Ms. P., 22 years old Indian female teacher, referred by her mother for suicidal attempts, self-mutilation, disappearing from home, frequent fights at work and outside, angry outbursts, mood swings, insomnia, anorexic symptoms.

Ms. P.'s, a 22 year old, an Indian patient was always invalidated by her mother of her pain experienced during her sexual abuse for many years by her alcoholic father in her childhood and was often blamed for creating problems between parents. Running away from the house, cutting her hands with knives and blades, avoiding food for days, excessive crying, hiding behind the walls, escaping school were the main behaviors eventually punished by her mother? Her daily diary was filled with one statement "I am a human being", which was considered as an evil effect on her. Often taken to religious leaders where she was asked to sit in front of fire or lashed in order to extract the evil from her body. During the testing session she could concentrate at the maximum of 5- 7 minutes, preoccupied with self –abusing statement, fidgeting, feeling insecure, wanting to run away from the place whenever the question is too stressful for her. The mother reported that her school period was quite problematic, symptoms of impulsive behaviors, ADHD symptoms, fighting with peers& defiance to teachers and school rules, no care of personal hygiene, symptoms of insomnia and lacked basic skills. She was often on a school record.

It is so much explained by Lineham (1993) regarding the environment of such cases in regards to invalidation connected to abuse occurs when the child does come

forward and reports the abuse and is not believed as by Ms. P's mother, and eventually this invalidation has the most powerful impact of all. The experience of sexual abuse connects many of the symptoms of BPD into a coherent pattern such as: dissociation; to escape from frightening, confusing situation, splitting; to continue the relationship with the relative, low self-esteem; leading to dependency, fear of abandonment, suicidal feelings and depression. Borderline personality Disorder affects both the individuals with BPD and those who care about them.

Further to this statement the neurological excitability of BPD related to emotional overreaction and difficulty controlling and modulating anxiety and anger are well exhibited by the same client during the session. Applying tests to such patients is not an easy task. The difficulties faced will be discussed later in the chapter.

3. Shared Symptomatology

As noticed from all the four cases mentioned above is in line with what Wender (1995) one of the pioneers of adult ADHD explains about the co morbidity of these two disorders: share symptoms of impulsivity, affective instability and angry outbursts.

Severe anorexia is a common variant of self-destructive behavior noticed in many of the patients of Indian sample. Suicidal attempts are more common in the Indian culture in comparison to Suicidal ideation in Kuwaiti sample. Many of them perceived as a religious issue that prohibits suicide. Often such half – hearted attempts are not a wish to die but a way to communicate pain and a plea for others to intervene. Such self – induced pain functions as a distraction from other forms of suffering. It also serves as expiation for sin.

Another concept presented by John Kafka (1969) is that as borderline client regresses under stress and has difficulty maintaining a self – identity, they resort to physical self- damage to gain a stabilizing sense of their own reality. The sight of their own blood combined with the pleasurable sensation of the wound, offers an existential feeling of being alive.

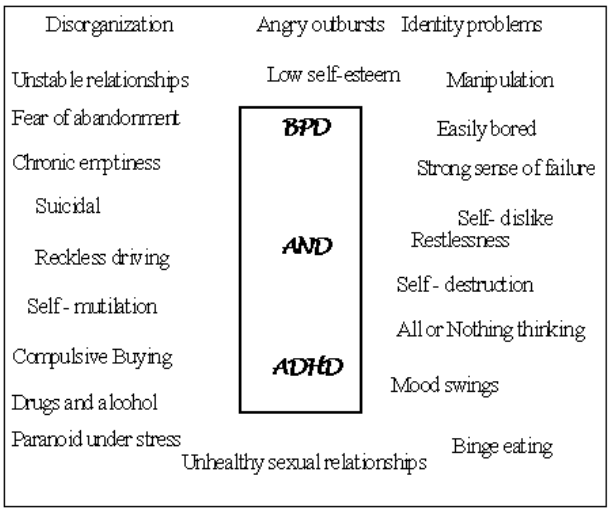
As stated in American Academy of Child and Adolescent Psychiatry (2003), that these two disorders share the similarities of distractibility and impulsiveness and somewhat lowered self –esteem. A significant fact is observed during my data collection that almost all the BPD patients show symptoms of low self – esteem. They try their best to prove their worth either to themselves or to the most significant person in their life, mainly mother or father. Thus they live in a constant conflict of self-identification. Being emotionally hypersensitive, they always fluctuate between right and wrong.

A broad variety of Axis I disorders are noticed in these two samples with no bias to the cultures: generalized anxiety disorder, panic disorder, substance and alcohol abuse, depression, impulse control disorders, and eating disorders.

A general look of the symptoms seen in the BPD & ADHDs of the both the cultures.

3.1. Shared Symptoms

The interview of Indian sample commonly reported symptoms are: sense of abandonment, unstable social relations, unstable self-image, impulsivity (unhealthy sexual relations, smoking, drugs, alcohol), self-mutilating behaviors (anorexic behavior, eating coals & glass to bleed) affective instability (predominately exaggerated reaction to situations) paranoid ideation or dissociation (escape to superstitions and or the effect of supernatural powers). As explained by Zanarini& Gunderson, 1986 that the cognitive experiences that best discriminate borderline patients are non-delusional, paranoid experiences (e.g. ideas of reference, undue suspiciousness), dissociative experiences, and odd types of thinking, particularly superstitiousness, magical thinking and a sixth sense about things. Besides that the case histories taken from the cases as well as their parents about their childhood show symptoms of ADHD, mainly are: lack of concentration, impulsive behaviors in and out of school, poor academic performance, constant negative reports from school, disorganization and repetition of classes.



Somewhat similar to the Indian sample the Kuwaiti sample is also diagnosed with sense of abandonment especially by parents (more than one marriages), impulsivity (driving recklessly, binge eating, unhealthy sexual relationships, smoking, compulsive buying), self-mutilation (cutting hands, overdose of medicines), affective instability (high levels of mood) anger (high level of angry outbursts, physically violent to others, destructive) and paranoid ideation (disliked and cheated by others) and symptoms of ADHD.

The above qualitative description of cases from both the cultures (India and Kuwait), show the significant existence of BPD and ADHD in India and Kuwait. Quite against to the hypothesis of the current research stating that there are significant differences between two cultures on the common symptomatology of BPD and ADHD but it is in line with what Paris (1992) explained that the key features of BPD are dysphonia, impulsive behavior and chaotic relationships. Social disintegration fosters dysphasia by not providing buffers or comforting structures, particularly religion and community membership. Impulsive behavior depends on the social containment of deviant behaviors, including such characteristically "borderline" behaviors as self-mutilation, repeated suicide attempts and substance abuse. In integrated societies, such behavior is not tolerated and the distress, which individuals communicate, is either repressed or channeled elsewhere. Chaotic relationships are more likely to occur when young people

are left on their own to choose intimate relationships. In societies where families and communities play an active role in determining the choice of a partner, unstable and rapidly disintegrating relationships are less common. The two cultures studied in this research are highly integrated; family and societal norms play a major role in an individual life.

Within any culture, the cohesion and structure of families may vary. We know that those who develop BPD have abnormal families which do not provide basic levels of parental care which, when internalized, modulate dysphonic affects in later life or encourage the development of autonomy needed to individuate and deal with the wider world. These families seem to be characterized by inconsistent and confused boundaries (Herman 1989) When parental sanctions no longer carry weight and there is an absence of social containment, the vacuum of influence can be filled by peer groups which sanction impulsive behavior (Milon 1987). As explained by different case studies, most of the BPD patients are brought up in an authoritarian environment with little or no freedom and rigid boundaries.

4. Rationale

The rationale proposed for this study is that there is co-morbidity between Borderline personality Disorder (BPD) and Attention Deficit Hyperactivity Disorder (ADHD); a BPD is an unrecognized Adult ADHD. Both the disorders share symptoms like anger, impulsivity and mood swings. Thus the treatment of BPD is incomplete without treatment strategy of ADHD. Keeping such objectives in mind a research based on hypotheses stating the existence of significant co-morbidity between BPD and ADHD, further justifying with three common symptoms: anger, impulsivity and mood swings shared by both the disorders and existence of significant differences between cultures on the common symptomatology; is carried out on two different cultural samples; Indian and Kuwaiti.

5. Interpretation of Data

In the continuation of the above presentation, following discussion is based on the hypotheses formulated to check the significant existence and difference of symptomatology within culture of India, within culture of Kuwait and between cultures of India and Kuwait for which, statistical analyses are carried out .Three main kinds of analysis are presented: Descriptive analysis: Mean SD and Range, Inferential analysis: t-test, Correlation and Multiple Regression and Graphic analysis; tables and graphs

The interpretation and analysis of the scores received in this study is carried out in a dual manner: qualitatively and quantitatively. The qualitative interpretation of the data is mentioned in the beginning with the help of the case studies from both the cultures and the symptoms observed overall in both the samples. Range of scores is crudely discussed qualitatively for both the cultures.

5.1. Range of Scores

Inception of the Range of scores BPD scale gives information in two parts, first part is the score received from personality questionnaire and second part is the interview on the respective questions, which is discussed under the umbrella of qualitative interpretation.

Inception of the range of scores shows that on clinical measures of BPD both the cultures share a reverse trend, Indian group scores more in the moderate range (16), whereas the Kuwait group scores higher in the severe range (16).

On anger scale, Indian sample (7) in comparison to Kuwaiti sample (2) has a higher score in the first range of minimal anger whereas Kuwaiti scores higher on moderate and severe ranges. Thereafter the second one leads the first group. Somewhat it is due to the alternate techniques practiced by both the groups. The first group practices yoga, meditation, and religious rituals whereas the second group lacks such practices. The common responses on coping strategies demonstrate that their anger is expressed out physically on self and others.

The raw scores of impulsivity show similarities of scores, both the groups show a very high score in the third range (61-90). These similarities are projected in different manners; alcoholism, drugs, smoking and unhealthy relationships, whereas reckless driving, binge eating and compulsive buying, smoking and unhealthy sexual relationships are seen in the second group. The percentile scores of impulsivity highlights Indian group in the 70th Percentile whereas Kuwait in 85th percentile.

Both the cultures stand quite similar on mood swings scale. More precisely, the Kuwaiti group sub scale of Level of Mood clubs the higher score on the third range 76-100; and Indian group scores higher on second sub scale; Reaction to situations. A closer observation shows that female group has a higher score on this scale with no bias to any culture.

Some variations do occur on ADHD scale, Indian group scores are somewhat evenly distributed between 0-150 (the first three ranges; 0-50, 51-100,101-150) and none in the highest range but Kuwaiti group has a large group (19/30) falls in the range between 51-100 and 2 out of 30 exceeds more than 150. The scores on the whole show higher possibility of ADHD in the BPD cases in Kuwait, which is further justified by Multiple Regression where BPD is very significantly and largely predicted by ADHD (51%).

A general look at the range of scores explains that there is existence and co morbidity of BPD and ADHD among adults in India and Kuwait, with significant occurrence of anger, impulsivity and mood swings among adults of both the cultures and there are differences between the cultures in regard to the symptomatology.

These scores are further computed for Multiple Regression to explain the co morbidity statistically between BPD and ADHD.

It will be pertinent to mention here that all precautions were taken to reduce confounding of results due to uncontrollability of different demographic variables such as age, gender, and marital status of the cases under study.

When t- test was applied to measure the impact of these variables on the different clinical measures the results of t-test indicated that no significant differences were observed due to unequal sample in terms of age gender and marital status.

5.2. Correlation Matrix

The Correlation table of Total Sample shows a very significant correlation between BPD and ADHD (0.421 significant at 0.001 level) BPD & Anger (0.301 significant at 0.05 levels) and ADHD& anger (0.479 significant at 0.01 levels). In fact ADHD is positively correlated with all the five variables significantly at 0.001 and 0.005 levels . BPD and MS (RS) are also show significant correlation between them 0.404 significant at 0.001 levels.

The individual sample correlation matrix of India and Kuwait demonstrate that in Indian sample BPD and ADHD are highly correlated with all the other variables at significance at 0.001 and 0.005 levels. Whereas the correlation matrix of Kuwait sample shows a very poor correlation between variables except BPD and ADHD (0.478 significant at 0.001 level) and ADHD & anger (0.555) significant at 0.001 level.

5.3. Correlation Matrix

INTER - CORRELATION MATRIX OF CLINICAL VARIABLES FOR INDIA (LEFT LOWER HALF) & KUWAIT (RIGHT UPPER HALF BOLD)

Clinical Variables	BPD	Anger	Impulsivity	MS (LM)	MS (RS)	ADHD
BPD	-	0.12	0.14	-0.22	0.25	0.48**
Anger	0.72**	-	0.32	-0.20	0.08	0.55**
Impulsivity	0.66**	0.33	-	-0.07	0.29	0.16
Mood Swings (Level of mood)	-0.53**	-0.45*	0.08	-	-0.26	-0.25
Mood Swings (Reaction to Situations)	0.43*	0.31	0.55**	-0.35	-	0.15
ADHD	0.57**	0.43**	0.58**	-0.43*	.51**	-

5.4. Multiple Regressions

The Multiple Regression applied to Total sample results prove that ADHD & Anger contributes 32%, significant at the absolute level of ***P< 0.000 and in predicting BPD and BPD & Impulsivity contributes 27%, significant at the absolute level **P<0.00O levels in predicting ADHD. Further the results explain that ADHD and Anger are the constant predictors of BPD. The high R^2 and F value significant at absolute confirms the contribution of ADHD to BPD. The multiple correlation coefficient (i.e.=0.57) shows that the relation between the observed and predicted values of the dependent variable is strong. The ANOVA for Multiple Regression justify the co morbidity between BPD and ADHD as they predict significantly and contribute equally to each other.

These symptoms however differ qualitatively and quantitatively between the two diagnostic groups and so in two different cultural groups studied in this research as hypothesized that there are significant differences between the two cultures on common symptomatology of BPD and ADHD. The ADHD's impulsivity is short lived and is thoughtless rather than driven in BPD; anger is episodic and short –lived in compared to the brooding anger of BPD. The results of this study as depicted in the Multiple Regression table of each country shows that in Indian sample BPD is predicted constantly by anger and impulsivity highly significant at the absolute level ***P< 0.000. The adjusted R^2 score explains that Anger and impulsivity contributes 62% in predicting BPD. The prediction of ADHD in the same sample (Indian) is by Impulsivity and Mood swings – Reaction to Situations (MSRS), highly significant at ***P<.001 level. The Adjusted R^2 score shows 35% contribution of Impulsivity and MSRS in predicting ADHD. In Indian sample the co morbidity is indirectly achieved through Anger, impulsivity and mood swings the common symptoms shared by both the disorders. Impulsivity contributes 44% in predicting BPD and 47% in predicting ADHD.

The second cultural group, Kuwaiti sample on the other hand shows prediction of BPD by ADHD, highly significant at 0 .004 with an adjusted R^2 score pointing out 23% contribution. However, the obtained value of R2 = 0.23 indicated that the proportion of variation in the dependent variable explained by the regression model is only 23%; hence the model did not fit well to the study population. Looking back the range of ADHD scores of BPD cases the scores in Kuwait were clustered in the higher range groups. The multiple correlation coefficient (i.e.=0.51) shows that the relation between the observed and predicted values of the dependent variable is strong.

ADHD in the same group (Kuwait) is predicted by Anger and BPD highly significant at the absolute *** P<0.000 level. The R score of both the variables 0.72 and Adjusted R2 score gives a contribution equals to 49% of BPD in predicting ADHD. Such results suggest the quantitative co morbidity between BPD and ADHD. The qualitative explanation can be derived from the different cases examined for this research.

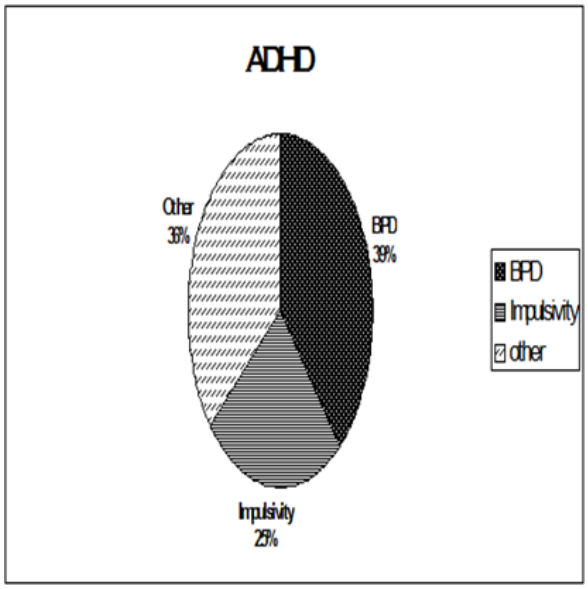
Mean differences of various variables are not statistically significant on the application of t-test therefore the results obtained from Multiple Regression analysis of Total sample taken effective estimate of co morbidity of ADHD and BPD.

5.5. Multiple Regressions

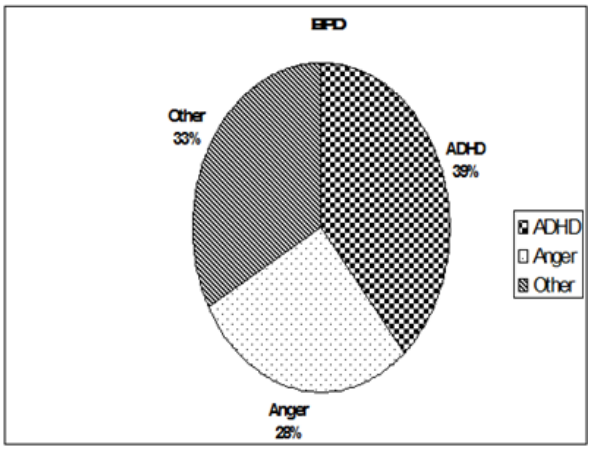
SUMMARY RESULTS OF MULTIPLE REGRESSION ANALYSES OF - INDIA, KUWAIT AND TOTAL SAMPLE

Target variables	Total	India	Kuwait
BPD	ADHD(0.39) Anger(0.28) Adj.R=0.32	Anger (0.56) Impulsivity(0.44) Adj.R= 0.62	ADHD(0.51) Adj.R = 0.23
ADHD	BPD (0.39) Impulsivity(0.25) Adj. R= 0.54	Impulsivity(0.47) Mood swings(0.32) (Reaction to situations) Adj. R = 0.35	Anger (0.52) BPD (0.48) Adj.R=0.49

5.6. Predictors of BPD in Total Sample



5.7. Predicators of ADHD in Total Sample



6. Discussion

The interview of Indian sample commonly reported symptoms are: sense of abandonment, unstable social relations, unstable self-image, impulsivity (unhealthy sexual relations, smoking, drugs, alcohol), self-mutilating behaviors (anorexic behavior, eating coals & glass to bleed) affective instability (predominately exaggerated reaction to situations) paranoid ideation or dissociation (escape to superstitions and or the effect of supernatural powers). As explained by Zanarini & Gunderson, 1986 that the cognitive experiences that best discriminate borderline patients are non-delusional, paranoid experiences (e.g. ideas of reference, undue suspiciousness), dissociative experiences, and odd types of thinking, particularly superstitiousness, magical thinking and a sixth sense about things. Besides that the case histories taken from the cases as well as their parents about their childhood show symptoms of ADHD, mainly are: lack of concentration, impulsive behaviors in and out of school, poor academic performance, constant negative reports from school, disorganization and repetition of classes.

Somewhat similar to the Indian sample the Kuwaiti sample is also diagnosed with sense of abandonment especially by parents (more than one marriages), impulsivity (driving recklessly, binge eating, unhealthy sexual relationships, smoking, compulsive buying), self-mutilation (cutting hands, overdose of medicines), affective instability (high levels of mood) anger (high level of angry outbursts, physically violent to others, destructive) and paranoid ideation (disliked and cheated by others) and symptoms of ADHD.

The above qualitative description of cases from both the cultures (India and Kuwait), show the significant existence of BPD and ADHD in India and Kuwait . Quite against to the hypothesis of the current research stating that there are significant differences between two cultures on the common symptomatology of BPD and ADHD but it is in line with what Paris (1992) explained that the key features of BPD are dysphoria, impulsive behavior and chaotic relationships. Social disintegration fosters dysphasia by not providing buffers or comforting structures, particularly religion and community membership. Impulsive behavior depends on the social containment of deviant behaviors, including such characteristically “borderline” behaviors as self-mutilation, repeated suicide attempts and substance abuse. In integrated societies, such behavior is not tolerated and the distress, which individuals communicate, is either repressed or channeled elsewhere. Chaotic relationships are more likely to occur when young people are left on their own to choose intimate relationships. In societies where families and communities play an active role in determining the choice of a partner, unstable and rapidly disintegrating relationships are less common. The two cultures studied in this research are highly integrated; family and societal norms play a major role in an individual life.

Within any culture, the cohesion and structure of families may vary. We know that those who develop BPD have abnormal families (Paris 1963), which do not provide basic levels of parental care which, when internalized, modulate dysphonic affects in later life or encourage the development of autonomy needed to individuate and deal with the wider world. These families seem to be characterized by inconsistent and confused boundaries (Herman 1989) When parental sanctions no longer carry weight and there is an absence of social containment, the vacuum of influence can be filled by peer groups which sanction impulsive behavior (Milon 1987). As explained by different case studies, most of the BPD patients are brought up in an authoritarian environment with little or no freedom and rigid boundaries.

The rationale proposed for this study is that there is co-morbidity between Borderline personality Disorder (BPD) and Attention Deficit Hyperactivity Disorder (ADHD); a BPD is an unrecognized Adult ADHD. Both the disorders share symptoms like anger, impulsivity and mood swings. Thus the treatment of BPD is incomplete without treatment strategy of ADHD. Keeping such objectives in mind a research based on hypotheses stating the existence of significant co-morbidity between BPD and ADHD, further justifying with three common symptoms: anger, impulsivity and mood swings shared by both the disorders and existence of significant differences between cultures on the common symptomatology; is carried out on two different cultural samples; Indian and Kuwaiti.

In the continuation of the above presentation following discussion is based on the hypotheses formulated to check

the significant existence and difference of symptomatology within culture of India, within culture of Kuwait and between cultures of India and Kuwait for which statistical analyses are carried out .Three main kinds of analysis are presented: Descriptive analysis: Mean SD and range, Inferential analysis: t-test, Correlation and Multiple Regression and Graphic analysis; tables and graphs

The interpretation and analysis of the scores received in this study is carried out in a dual manner: qualitatively and quantitatively. The qualitative interpretation of the data is mentioned in the beginning with the help of the case studies from both the cultures and the symptoms observed overall in both the samples. Range of scores are crudely discussed qualitatively for both the cultures.

Inception of the Range of scores BPD scale gives information in two parts, first part is the score received from personality questionnaire and second part is the interview on the respective questions, which is discussed under the umbrella of qualitative interpretation.

Inception of the range of scores shows that on clinical measures of BPD both the cultures share a reverse trend, Indian group scores more in the moderate range (16), whereas the Kuwait group scores higher in the severe range (16).

On anger scale, Indian sample (7) in comparison to Kuwaiti sample (2) has a higher score in the first range of minimal anger whereas Kuwaiti scores higher on moderate and severe ranges. Thereafter the second one leads the first group. Somewhat it is due to the alternate techniques practiced by both the groups. The first group practices yoga, meditation, and religious rituals whereas the second group lacks such practices. The common responses on coping strategies demonstrate that their anger is expressed out physically on self and others.

The raw scores of impulsivity show similarities of scores, both the groups show a very high score in the third range (61-90). These similarities are projected in different manners; alcoholism, drugs, smoking and unhealthy relationships, whereas reckless driving, binge eating and compulsive buying, smoking and unhealthy sexual relationships are seen in the second group. The percentile scores of impulsivity highlights Indian group in the 70th Percentile whereas Kuwait in 85th percentile.

Both the cultures stand quite similar on mood swings scale. More precisely, the Kuwaiti group sub scale of Level of Mood clubs the higher score on the third range 76-100; and Indian group scores higher on second sub scale; Reaction to situations. A closer observation shows that female group has a higher score on this scale with no bias to any culture.

Some variations do occur on ADHD scale, Indian group scores are somewhat evenly distributed between 0-150 (the first three ranges; 0-50, 51-100,101-150) and none in the highest range but Kuwaiti group has a large group (19/30) falls in the range between 51-100 and 2 out of 30 exceeds more than 150. The scores on the whole show higher possibility of ADHD in the BPD cases in Kuwait, which is further justified by Multiple Regression where BPD is very significantly and largely predicted by ADHD (51%).

A general look at the range of scores explains that there is existence and co morbidity of BPD and ADHD among adults in India and Kuwait, with significant occurrence of anger, impulsivity and mood swings among adults of both the cultures and there are differences between the cultures in regard to the symptomatology.

These scores are further computed for Multiple Regression to explain the co morbidity statistically between BPD and ADHD.

It will be pertinent to mention here that all precautions were taken to reduce confounding of results due to uncontrollability of different demographic variables such as age, gender, and marital status of the cases under study.

When t- test was applied to measure the impact of these variables on the different clinical measures the results of t-test indicated that no significant differences were observed due to unequal sample in terms of age gender and marital status.

The Correlation table of Total Sample shows a very significant correlation between BPD and ADHD (0.421 significant at 0.001 level) BPD & Anger (0.301 significant at 0.05 levels) and ADHD& anger (0.479 significant at 0.01 levels). In fact ADHD is positively correlated with all the five variables significantly at 0.001 and 0.005 levels . BPD and MS (RS) are also show significant correlation between them 0.404 significant at 0.001 levels.

The individual sample correlation matrix of India and Kuwait demonstrate that in Indian sample BPD and ADHD are highly correlated with all the other variables at significance at 0.001 and 0.005 levels. Whereas the correlation matrix of Kuwait sample shows a very poor correlation between variables except BPD and ADHD (0.478 significant at 0.001 level) and ADHD & anger (0.555 significant at 0.001 level).

The Multiple Regression applied to Total sample results prove that ADHD & Anger contributes 32%, significant at the absolute level of ***P < 0.000 and in predicting BPD and BPD & Impulsivity contributes 27%, significant at the absolute level **P < 0.00O levels in predicting ADHD. Further the results explain that ADHD and Anger are the constant predictors of BPD. The high R^2 and F value significant at absolute confirms the contribution of ADHD to BPD. The multiple correlation coefficient (i.e. = 0.57) shows that the relation between the observed and predicted values of the dependent variable is strong. The ANOVA for Multiple Regression justify the co morbidity between BPD and ADHD as they predict significantly and contribute equally to each other.

These symptoms however differ qualitatively and quantitatively between the two diagnostic groups and so in two different cultural groups studied in this research as hypothesized that there are significant differences between the two cultures on common symptomatology of BPD and ADHD. The ADHD's impulsivity is short lived and is thoughtless rather than driven in BPD; anger is episodic and short –lived in compared to the brooding anger of BPD. The results of this study as depicted in the Multiple Regression table of each country shows that in Indian sample BPD is predicted constantly by anger and impulsivity highly significant at the absolute level ***P< 0.000. The adjusted R^2 score explains that Anger and impulsivity contributes 62% in predicting BPD. The prediction of ADHD in the same sample (Indian) is by Impulsivity and Mood swings – Reaction to Situations (MSRS), highly significant at ***P<.001 level. The Adjusted R^2 score shows 35% contribution of Impulsivity and MSRS in predicting ADHD. In Indian sample the co morbidity is indirectly achieved through Anger,

impulsivity and mood swings the common symptoms shared by both the disorders. Impulsivity contributes 44% in predicting BPD and 47% in predicting ADHD.

The second cultural group, Kuwaiti sample on the other hand shows prediction of BPD by ADHD, highly significant at 0 .004 with an adjusted R^2 score pointing out 23% contribution. However, the obtained value of R2 = 0.23 indicated that the proportion of variation in the dependent variable explained by the regression model is only 23%; hence the model did not fit well to the study population. Looking back the range of ADHD scores of BPD cases the scores in Kuwait were clustered in the higher range groups. The multiple correlation coefficient (i.e.=0.51) shows that the relation between the observed and predicted values of the dependent variable is strong.

ADHD in the same group (Kuwait) is predicted by Anger and BPD highly significant at the absolute *** P<0.000 level. The R score of both the variables 0.72 and Adjusted R2 score gives a contribution equals to 49% of BPD in predicting ADHD. Such results suggest the quantitative co morbidity between BPD and ADHD. The qualitative explanation can be derived from the different cases examined for this research.

Mean differences of various variables are not statistically significant on the application of t-test therefore the results obtained from Multiple Regression analysis of Total sample taken effective estimate of co morbidity of ADHD and BPD.

7. Limitations and Recommendations

The process of collecting sample has been too long and too difficult. Main problems faced are:

1. Physical Distance: Kuwait being one state is restricted in its physical limits and all the data collected are from one city. India as widely spread out poses great challenges in every aspect. Data is collected from Udaipur, Mumbai, Pune, Goa, Banglore and Delhi.
2. Permission formalities to test diagnosed BPD patients:- the cases are taken from psychiatric centers, counseling centers, and jails after long procedure and set formalities of each center. The jail psychiatrist diagnosed all the cases screened out in prisons; rather say it they are referred by them only. Since in jail the main cases were criminals in nature, time and place was fixed beforehand, Refusal to test such patients was the first response, misdiagnosis was one of the challenge for the professionals. There is a big lack of proper testing, structured clinical interview and structured clinical observation. Excessive workload is one of the main reasons, which is followed by a big lack of proper resources, absence of proper guidance and professional trainings, psychological tests. There is a big need of proper information, public awareness and acceptance of such disorders and its proper treatment. Both the cultures still hesitate in approaching for treatment. This was the first and foremost reason for such a long period of data collection. Indian sample had much more roadblocks than Kuwaiti sample. Fear of being exposed to second person other than the counselor or psychiatrist was one of the main hesitations for the patient.
3. Patients' moods, manipulation and timings, which increased the testing duration more than set time. A good percentage was very cooperative and really showed interest in doing the tests. Each patient was approached first to get introduced to, built a rapport and then in second or third session applies the tests. At times they finished in one setting otherwise the sessions were repeated to complete the tests. The objective was clearly explained to the clients. Still after such preparations, many of them had severe tantrums: tests have silly questions, it's a waste of time, too revealing, the tests are quite irrational, too smart to be tested are the common responses received during the data collection. Some of them walked away in the middle of the session, one or two ran away from the session and some threw the papers. Keeping them focused was a great challenge. Individual reservations and resistance are faced throughout the testing period in both the cultures.

Borderline personality disorder has been extensively researched but still it seems there is lot more needed to explain about this disorder. It opens doors for various studies: Low – self-esteem and BPD, Parent – child relationship and BPD so on and so forth.

References

[1] Grove J. Management of the Borderline patient on a medical or surgical ward: The psychiatric consultant role. International Journal of Psychiatry in Medicine 6, 1981, 337-348.

[2] Zetzel, E A Development Approach to the Borderline Patient. American Journal of Psychiatry, 127, 1971, 867-871.

[3] Gunderson, J.G., Carpenter, W. T., & Strauss, J. S. Borderline and Schizophrenic Patients: A comparative study. American Journal of Psychiatry, 132, 1987. 1259-1264.

[4] Linehan M.M., Skills training Manual for Treatment Borderline Personality Disorder, The Guilford Press University of Washington, New York, London 1993 2-4.

[5] Adler, G., & Buie, D. Aloneness and borderline psychopathology: The possible relevance of child development issues. International Journal of Psychoanalyses, 60, 1979, 83-96.

[6] Wender, P.H. Attention Deficit hyperactivity Disorder in Adults. New York: Oxford University Press. 1995,13-42

[7] Kafka, J.S. The body as transitional object: A Psychoanalytic study of a self- mutilating patient. British Journal of Medical Psychology, 42, 1969. 207-212.

[8] Zanarini, M.C., & Gunderson, J.G. Unpublished manuscript. 1986.

[9] Paris, J. M.D. Social Risk Factors for Borderline Personality Disorder: A Review and Hypothesis. Canadian Journal of Psychiatry, 37, 1992, 510-515.

[10] Herman, J.L, Perry J.C, & Van der K., B. A. Childhood trauma in Borderline Personality Disorder. American Journal of Psychiatry, 146, 1989, 490-495.

[11] Millon, T. On the genesis and prevalence of Borderline Personality Disorder: a Social Learning Thesis. Journal of Personality Disorder, 1, 1987, 354-372.