Research Article

FAMILY FUNCTIONING IN THE FAMILIES OF INDIVIDUAL WITH CANNABIS DEPENDENCE

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A B S T R A C T

Background: Family plays a key role in the healthy development of an individual's personality. The presence of a positive family functioning is a prerequisite for the healthy growth and development of the members from a given family unit. In addition, a positive family functioning ensures appropriate fulfillment to the needs and demands of the family members. Dependence on psychoactive substances by one or more family member could dampen positive experiences within the family environment to a significant extent. In the long run, these families tend to become markedly pathological. So, this study was planned to see the family functioning of individuals with cannabis dependence in Indian setting. **Method:** The study was a cross sectional, hospital based and the samples were selected through purposive sampling technique. This study was included 30 individuals (patients diagnosed with cannabis dependence as per ICD -10) and 30 individuals from family of normal controls (i.e., a family without any cannabis dependence member). Age, education and family income matched with either group.GHQ-12 &The McMaster family assessment device were applied on all the selected individuals in the study. **Results:** A poorer of family functioning was found in the domains of "Problem Solving", "Communication", "Roles", "Affective Responsiveness", & "Behavior Control" in the families of individual with cannabis dependence as compared to families of normal controls. **Conclusion:** Finding indicated that there was significant difference in the family functioning showed by families had cannabis dependence as compared to families without cannabis dependence.

INTRODUCTION

The family is the primary unit of the society to take care the material, physical and emotional needs of people. Drug addiction and alcoholism causes significant intimidation to entire family system and the family environment tends to be become strained because of this problem. According to (Estein, *et al*, 1983) family functionality is a multidimensional constraint that demonstrates activity and interaction in a family in carrying out critical tasks in keeping family development and well-being as well as maintaining its integrity. Family functionality is also associated with behaviour related to family members it is not just limited to normal behaviour and even family can also form abnormal functionality (Mansfield, *et al*, 2015). Family functionality is a related form or process from time to time in the family (NurulHudani, *et al*, 2011). Meanwhile, according to (Openshaw, 2011) family functions are also not one but diverse as it encompasses stabilizing families i.e. stabilizing family economics, educating, preserving psychological and physical and family religious.The model identifies six dimensions of family functioning.

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Problem Solving, the first dimension of the MMFF, refers to the family's ability to resolve problems (issues which threaten the integrity and functional capacity of the family) at a level that maintains effective family functioning. Seven steps of effective problem solving are identified. The second dimension of the MMFF is Communication, which is defined as the exchange of information among family members. The focus is on whether verbal messages are clear with respect to content and direct in the sense that the person spoken to is the person for whom the message is intended. The third dimension is **Roles**. Here the MMFF focuses on whether the family has established patterns of behavior for handling a set of family functions which include provision of resources, providing nurturance and support, supporting personal development, maintaining and managing the family systems and providing adult sexual gratification. In addition, assessment of the Roles dimension includes consideration of whether tasks are clearly and equitably assigned to family members and whether tasks are carried out responsibly by family members. The fourth dimension, Affective Responsiveness, assesses the extent to which individual family members are able to experience appropriate affect over a range of stimuli. Both welfare and emergency emotions (Rado, 1961) are considered.

The fifth dimension, Affective Involvement, is concerned with the extent to which family members are interested in and place value on each other's activities and concerns. The healthiest families have intermediate levels of involvement, neither too little nor too much. The final dimension of the MMFF is Behavior Control which assesses the way in which a family expresses and maintains standards for the behavior of its members. Behavior in situations of different sorts (dangerous, psychological and social) is assessed as are different patterns of control (flexible, rigid, laissez-faire and chaotic are considered). More extensive descriptions of the MMFF are available elsewhere and General Functioning, assesses the overall health/pathology of the family (Epstein & Bishop, 1981; Epstein, Bishop & Baldwin, 1981; Epstein, Bishop & Levin, 1978).

Researchers focusing on the role of family relationships in the creation and maintenance of drug-related problems have identified a strong connection between disrupted family relationships and alcohol/cannabis and other drug addiction (Stanton *et al.* 1984, Stanton &Shadish 1997, Velleman 1992). Some research highlights the potential relations between alcohol-related coping behaviours and both psychological and relationship distress (Kahler *et al.* 2003). Issues related to cannabis and drug abuse colour all behaviour within a family system (Lederer 1991). Lederer suggests some markers that distinguish alcoholic families from other families, including reciprocal extremes of behaviour between family members, lack of a model of normalcy, and power imbalances in family organization. According to Nace and his colleagues (1982), some psychological factors that affect the alcoholic and their family include the stigma associated with alcoholism, emotional withdrawal, guilt and craving. Velleman (1992) also writes about the impact of drinking on family roles, communication, social life and finances; for example, finances that are limited through expenditure on alcohol/cannabis, family gatherings that are spoiled because of drunken behaviours, and roles that have to be allocated because the addicted family member is unable to carry out daily tasks.

McKay *et al* (1991) used a validated self-report scale, the Family Assessment Device, to investigate the relationship between substance abuse and family dysfunction for adolescents admitted after an acute psychiatric crisis. Diagnostic groups included attention deficit, oppositional, conduct, affective and anxiety disorders. All subjects reported family dysfunction but high parental alcohol use was significantly linked to two subscales, Emotional Responsiveness and Roles. These would indicate families where it was difficult to express or handle feelings, and where poorly defined roles and responsibilities led to impairment of trust.

There is a paucity of literature investigating the relationship between family interactions and cannabis dependence. The present study was carried out to examine the family interaction patterns in Indian families with individual of cannabis dependence.

MATERIALS AND METHODS

Design

This was a cross-sectional study examining differences between the family functioning of the families of clinically diagnosed cannabis-dependent men and families of men with no known psychiatric morbidity and substance dependence, including cannabis dependence. The study was carried out among families of patients who came at Ranchi Institute of Neuro-Psychiatry and allied science (RINPAS), a state government- owned psychiatric hospital situated in the Ranchi district of Jharkhand State in India. The study subjects were recruited using the 'purposive sampling method'.

Inclusion and exclusion criteria were as follows. The experimental group was made up of families diagnosed as having 'Mental and behavioural disorders due to use of cannabis' by consultant psychiatrists from the RINPAS, defined according to the ICD-10 Classification of Mental and Behavioural Disorders – Diagnostic Criteria for Research (ICD-10 DCR). Only those who had been married for 2 or more years, scored less than 3 in the General Health Questionnaire–12 (GHQ-12), were free from major physical illnesses, and who gave their informed consent to participation in the study were included. The control group were selected after matching their ages, educational and income levels with the experimental group. They also all scored less than 3 in the GHQ-12, did not have major physical illnesses, and gave their informed consent to participation in the study.

Participants

The sample consisted of 30 families of male patients diagnosed with cannabis dependence syndrome (ADS) using the criteria laid out in the ICD-10 (WHO, 1992) by consultant psychiatrists from the RINPAS, Ranchi, who had no other co-morbidities (either psychiatric, or major physical co-morbidity, or both); and 30 families of appropriately matched males (control group) with no history of cannabis dependence, who scored less than 3 on the GHQ-12.

Procedure

Participants completed a socio-demographic data sheet, then were administered The McMaster family assessment device .Both groups were given the GHQ-12 and those who scored below the cut-off (≤3) in the GHQ-12 underwent further assessments.

Tools

Study tools included a specially designed socio-demographic datasheet, The McMaster family assessment deviceand the GHQ-12. The McMaster family assessment device - McMaster Assessment Device is a 60-item self-report measure designed to assess family functioning in the following areas: problem solving, communication, roles, affective responsiveness, affective involvement, behavior control, general functioning (Epstein, *et al*, 1983). Using the Mc Master model of family functioning as a theoretical basis, Epstein *et al*. (1983) created an initial pool of 240 items consisting of 40 items for each of the first six dimensions mentioned above. They then gave this item to a large number of individual and on the basis of their responses selected 41 items that were most representative of a

single dimension and 12 items that were most highly related to all dimensions. Later this 53 item version was expanded it 60 items and factor analysis has also confirmed the subscale structure of the measure (Kabacoff *et al.*, 1990).The GHQ-12 is widely used to screen for psychiatric distress in communities (Goldberg & William, 1978)

Statistical Analyses

Descriptive statistics (percentage, mean, and standard deviation) were used to describe sample characteristics. The Chi-square test was used for describing and comparing categorical data. The independent sample *t'* were used to compare continuous variables between these 2 groups.

RESULTS

Present study finding revealed that there was no significant differences in socio-demographic variables between families of patients with cannabis dependence and families of normal controls such as informant's age, education occupation, domicile, education, religion and family income (table-1-2). Finding of the present study also indicated that the families with cannabis dependents were perceived dysfunctional functioning pattern in the domains of "Problem Solving", "Communication", "Roles", "Affective Responsiveness", & "Behavior Control" as compared to families without cannabis dependents. (table-3)

Table 1 Comparison of Socio-demographic characteristics of families with and without Cannabis Dependent

Variables		Groups		χ^2/Fisher Exact test	df	P
		Study group (N=30) n (%)	Control group (N=30) n (%)			
Sex of the informants	Male	22(73.3)	25(83.3)	0.890	-	0.532
	Female	8(26.7)	5(16.7)			
Marital Status of the Patients	Married	17(56.7)	13(43.3)	1.067	1	1.000
	Unmarried	13(43.3)	17(56.7)			
Marital Status of the informants	Married	25(83.3)	28(93.3)	1.498	-	0.424
	Unmarried	5(16.7)	2(6.7)			
Domicile	Rural	13(43.3)	21(70)	5.082	-	0.078
	Semi-urban	3(10)	3(10)			
	Urban	14(46.7)	6(20)			
Religion	Hindu	28(93.3)	29(96.7)	1.498	-	0.424
	Muslim	2(6.7)	1(3.3)			
Occupation of the Informants	Employed	21(70)	24(80)	0.800	1	0.371
	Unemployed	9(30)	6(20)			
Occupation of the Patients	Employed	9(30)	13(43.3)	1.148	1	0.284
	Unemployed	21(70)	17(56.7)			

Table 2 Comparison of Socio-demographic characteristics of families with and without Cannabis Dependent

Variable	Groups			P
	Study group (N=30) Mean ± SD	Control group (N=30) Mean ± SD	t (df =58)	
Age of the patients	31.46±10.75	27.63±7.72	1.586	0.118
Age of the Informants	38.50±9.62	42.70±10.10	1.649	0.105
Education of the Informants	9.80±2.73	9.03±2.91	1.050	0.298
Education of the Patients	10.56 ± 2.32	9.70 ± 2.85	1.292	0.202
Informants Income	8100.00 ± 7544.76	8466.00 ± 6532.33	0.201	0.841
Family Income	17683.00 ± 5652.61	12133.00 ± 7195.76	1.765	0.083

Table 3 Comparison of families with and without Cannabis Dependent on domains of the McMaster family assessment device

Domains of The McMaster family assessment device	Groups		t (df =58)	P
	Study group (N=50) Mean ± SD	Control group (N=50) Mean ± SD		
Problem Solving	12.10 ± 2.04	13.56 ± 1.25	3.357	.001***
Communication	19.26 ± 3.50	26.10 ± 2.21	9.027	.001***
Roles	25.13 ± 3.26	27.33 ± 2.57	2.896	0.05*
Affective Responsiveness	12.20 ± 2.55	18.46 ± 3.21	8.365	.001***
Affective Involvement	15.20 ± 2.44	17.47 ± 3.07	1.040	.303
Behavior Control	18.26 ± 3.55	23.13 ± 2.22	6.360	.001***
General Functioning	26.50 ± 2.97	28.50 ± 3.32	1.841	.071

***P <0.001, *P <0.05

DISCUSSION

The present study was conducted on the out Patient Department of the Ranchi Institute of Neuro Psychiatry & Allied Sciences (RINPAS), Kanke, Ranchi. It was based on purposive sampling technique. This was a comparative study and 30 families from the patients diagnosed with cannabis dependence and 30 of families from normal controls (i.e., a family without any cannabis dependence member). This study was planned to assess the family functioning in the families of patients with cannabis dependence and families of normal controls.

The result of the present indicated that there was significant difference between the families with and without cannabis dependents in various areas of The McMaster family assessment device. We found that families with cannabis dependents perceived poor family functioning as compared to families without cannabis dependents. The mean of present study was found significantly lower in the various domains of the The McMaster family assessment device i.e. "Problem Solving","Communication","Roles","Affective

Responsiveness", & "Behavior Control"in the families of cannabis dependents as compared to families without cannabis dependents. Present study finding implicate significant poor functioning in families with cannabis dependents. Cannabis can have a negative effect on someone's family. It is evident that when someone is high there are certain functions that are impaired. These include irregular or unreal sensory perceptions, brain fog, decreased problem-solving abilities and coordination problems. Cannabis can also enhance feelings of pleasure, intense thoughts, anxiety and appetite. All of these factors can begin to have an effect on a family functioning in the families with cannabis dependents. Kaufman and Pattison (1981) suggest that alcoholism/ substance use can adversely affect the family system and that dysfunctional family functioning can promote, and maintain, cannabis and other substance. According to Bennett and Wolin (1990), "alcoholism or other substance is very much a family illness. When substance is diagnosed for one family member, the chances are very good that it has previously appeared in prior generations and that it will surface again in the next generation." Family studies show that first-degree relatives of substance are three to five times more likely to develop substance use than the general population (Schukit 1999).

Children of parents who are alcoholics/ cannabis face a higher risk of alcoholism, even when adopted into a non-alcoholic family, suggesting a genetic component to alcoholism as well (Hesselbrock 1995, Cadoret *et al*. 1985). It is probably impossible to determine how much a genetic predisposition is a contributing factor to familial transmission of cannabis and drug addiction and how much is caused by particularly unhealthy family dynamics and functioning and other socio-cultural factors such as poverty and, therefore, the findings of this study is in consonance. However, on the other hand social factors that affect early development within the family such as a lack of mutual attachment, ineffective parenting and a chaotic home environment have been shown to be crucially important indicators of risk (Coyer 2001, NIDA 1997

Studies have observed that families without substance use disorder perceive more healthily in terms of overall functioning as compared to families with cannabis dependents **(**Wills &Yaeger, 2003). Burlew *et al* (2009) reported that families with substance dependents have been found strong and positive family bonds, the family's paying satisfactory attention to the children, clear interfamilial rules and everyone obeying these are the protective factors against and determined that exceptional behaviors are more common among adolescents with families that exhibit unhealthy functioning than among adolescents with families that exhibit healthy functioning.

CONCLUSION

Finding of the present study concludes that Cannabis can have a negative impact on family functioning and system i.e ""Problem Solving", "Communication", "Roles", "Affective Responsiveness", & "Behavior Control" in the families of individual with cannabis dependence.

The present study has some limitation like small sample size, samples were collected from a single research site and cultural variations may have introduced confounds. Future research on the relationship between parenting and family factors, and adolescent substance use, is needed across a wide variety of cultural contexts.

References

1. Bonnet, U. and Scherbaum, N. 2010. Cannabis use disorders. Part II: psychiatric and somatic sequelae and comorbidities. Fortschritte Neurologie Psychiatry., 78: 360–367.
2. Budney, A.J. and Lile, J.A. 2009. Moving beyond the cannabis controversy into the world of the cannabinoids. *International Review of Psychiatry*.,21: 91–95.
3. Burlew, A.K. *et al*. 2009. Neighborhood Risk, Parental Supervision and the Onset of Substance Use among African American Adolescents. J Child Fam Stud., 18:680–689
4. Cadoret, R.J. *et al*. 1985. Alcoholism and antisocial personality: Interrelationships, genetic, and environmental factors. Arch. Gen. Psychiatry., 42:161−167
5. Coyer, S.M. 2001. Mothers recovering from cocaine addiction: Factors affecting parenting skill.JOGNN.,30 (1):71−79.
6. Eitle, D. 2005. The moderating effects of peer substance use on the family structure–adolescent substance use association: Quantity versus quality of parenting. Addict. Behav., 30, 963 – 980
7. Epstein, N. B. and Bishop, D.S. 1981. Problem centered systems therapy of the family. In A. S. Gurman& D. P. Kniskern (Eds.), Handbook of family therapy. New York: Brunner/Mazel
8. Epstein, N.B. *et al*. 1978. The McMaster family assessment device. J. Marital Fam. Ther., 9(2): 171-180.
9. Epstein, N.B. *et al*. 1978. The McMaster model of family functioning. J. Marital Fam. Ther., 4:19-31..
10. Epstein, N.B. *et al*. 1983.The McMaster Model: View of healthy family functioning. Edited by Walsh F. Normal family processes. New York, Guilford Press, 138-160.
11. Epstein, N.B., *et al*. 1981.McMaster Model of Family Functioning: A view of the normal family. In F. Walsh (Ed.), Normal family processes. New York: Guilford Press, 1981.
12. Finney, J.W. *et al*. 1980. Post treatment experiences and treatment outcome of alcoholic patients six months and two years after hospitalization. J. Consult. Clin. Psychol., 48: 17-29.
13. Franks, P.*et al*. 1992. Social relationships and health: The relative roles of family functioning and social support. Social Science and Medicine.,34: 779-788.
14. Hesselbrock, B. 1995. The genetic epidemiology of alcoholism" in H. Begleiter& B. Kissin (eds.) The Genetics of Alcoholism (pp. 42−61), Oxford University Press, New York. .
15. Indian Council of Medical Research 1993 . - Report on Drug Abuse, New Delhi.
16. Kabacoff R, *et al*. 1990. A psychometric study of the McMaster Family Assessment Device in psychiatric medical and nonclinical samples. J. Fam. Psychol., 3:431–439.
17. Kadri, A.M.*et al*. 2003. A study of socio-demographic profile of substance abusers attending a de-addiction centre in Ahmedabad city. *Indian J. Community Med*.. 74.76
18. Kendler, K.S. and Prescott, C.A. 1998. Cannabis use, abuse and dependence in a population-based. Am. J. Psychiatry., 160:687–695.
19. Liepman, M.R. *et al*. 1989. Family functioning of male alcoholics and their female partners during periods of drinking and abstinence. Fam. Process., 28: 239-249.
20. Linsky, A.S.*et al*. 1987. Social stress, normative constraints and alcohol problems in American states. Social Science Medical., 24: 875-883.
21. Machado, J.A. 2015. Earning Functions in Portugal 1982-1994: Evidence from Quantile Regressions'. Empirical Economics.,26: 115–34.
22. Mansfield, K.A. *et al*. 2015: The Family Assessment Device: An Update. Fam. Process., 54: 82-93.

23. McKay, J.R.*et al*. 1991.Family dysfunction and alcohol and drug use in adolescent psychiatric inpatients. J Am Acad Child Psy., 30: 976-972.
24. Ongel, A. *et al*. 2016. The Assessment of Family Functions, Dyadic Adjustment, and Parental Attitude in Adolescents with Substance Use Disorder. Archives of Neuropsychiatry., 53: 38-44
25. Openshaw, K.P. 2011. The Relationship between Family Functioning, Family Resilience, and Quality of Life among Vocational Rehabilitation Clients. Unpublished thesis doctorate. Utah: Utah State University.
26. Schafer, G. 2011. Family functioning in families with alcohol and other drug addiction. Social Policy. Journal of New Zealand.,37: 1-17.
27. Soellner, R. and Gabriel, U.2008. Typical pothead? Stereotypes and person perception. European Addiction Psychiatry., 54: 32–37.
28. Van, D.B.W. 2008. Forum: decriminalization of cannabis. Curr Opin Psychiatr. 21: 122–126.

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