ORIGINAL RESEARCH PAPER

Psychiatry

CANNABIS USE A BURDEN ON SOCIETY? A CROSS-SECTIONAL STUDY ON SOCIO-DEMOGRAPHIC DATA, MOTIVATIONAL FACTORS AND PATTERN OF CANNABIS USE IN INDIAN POPULATION.

KEY WORDS: Cannabis, Psychiatric, Schizophrenia, Psychosis, Drug, Bhang, Abuse

Dr Devi Singh* Assistant Professor, Department of Psychiatry, KM Medical College and Hospital, Sonkh Road, Mathura, Uttar Pradesh, India. *Corresponding Author

Dr Varun Singh Assistant Professor, Department of Orthopedics, RUHS Medical College, Jaipur

ABSTRACT

Background: Cannabis use has been historically associated with Indian population, various effects of cannabis are described including therapeutic use and side effects. This study shows motivational factors and pattern of cannabis use in Indian population.
Materials and method: Study includes 60 cases , who sought psychiatric help. Patients were divided into two groups, 30 cannabis users and 30 non- cannabis users, proforma contained details regarding socio-demographic variables, dose and duration of cannabis use and motivational factors was filled. Four psychological tools were used for evaluation.
Results: on comparing two groups of cannabis users and non-users, cannabis users were subdivided on the basis of clinical presentation into two groups, paranoid schizophrenia type and manic depressive psychosis type. Pleasure and intoxication are the major motivational factors to cannabis use. 50 % of subjects were bhang users. Chronic use of bhang for an average period of 11 years could result into schizophrenia like symptomatology (26.7) and equally MDP- like symptomatology (30 %).
Conclusion: cannabis use causes spectrum of psychiatric conditions including, paranoid schizophrenia, MDP, tangential thinking, circumstantiality and many other, that is why it is important to understand motivational factors and its demographic data in our population so that efforts can be made to eradicate cannabis abuse.

INTRODUCTION:

To be able to reduce the burden of cannabis abuse and its adverse impact on society it is important to have data on its socio-demographic pattern and motivational factors for its use.

W.B.O Shaughnessy , a british physician working in Calcutta in 1839 reported on the analgesic , anticonvulsant and muscle relaxant properties of the drug. After this the drug was widely prescribed by western world for various ailments and discomforts such as coughing , migraine, headache and painful menstruations. But in India cannabis has a long history and is associated with mythological and spiritual experiences. People use it at some point in their lives and many become addict. Adverse effects of cannabis can be reviewed as its relation to psychosis, its cognitive effects, its relation to personality and behavior , withdrawal symptoms and physical effects of cannabis.

Cannabis was a subject of controversy in the ancient times , it is a matter of debate today as well, some believe that long-term use of cannabis produce harmful effects on cognition and personality and it may even cause psychosis and brain damage in addition to other physical affects. There are others who hold that cannabis is a relatively benign addiction and does not produce any deleterious effects . the present study was undertaken to make effort to throw some light on these controversial issues.

MATERIALS AND METHOD:

This study was conducted to find out motivational factors for indulgence in cannabis (taken in company or otherwise and time of the day) in which cannabis is used, whether cannabis use has any causal relationship to the origin of psychiatric pathology, Severity (duration , dose , frequency) of cannabis use has any relation with psychiatric help and role of personality dimensions in the cannabis use.

Study also presents socio-demographic data regarding cannabis use in Indian Population.

Following are the Inclusion criteria:

Age group of patients was between 16 to 45 years , patients were of primary level of education, Patients seeking help from the OPD , with definite history of cannabis use (any preparation), preceding the onset of psychiatric illness.

Exclusion criteria are:

Patients with family history of mental illness, Patients with psychiatric pathology before and without the use of cannabis, Patients who used alcohol , opium, etc

Study sample comprised of 30 cases of cannabis users, who sought psychiatric help.

All the patients who qualified the above inclusion criteria were evaluated by using a specially designed proforma, this proforma contained details regarding socio-demographic variables, presenting complaints, dose and duration of cannabis use and motivational factors. It also contained details of family history , personal history, premorbid personality and present illness. These all details were elicited by the investigator himself.

Observations:

On comparison of 30 cannabis- users psychiatric patients with 30 non-cannabis psychiatric patients ;

The experimental group of cannabis users on account of different clinical presentations was divided into two sub-groups , paranoid schizophrenia like and manic depressive psychosis like patients.

Majority of cannabis users and non-users fell in age range of 20 to 40 years. The overwhelming majority of cannabis users was educated from primary to high school.

One fifth of cannabis users came from rural areas.

Pleasure and intoxication are the major motivational factors to cannabis use. Other factors were stress , strain and boredom (30%) and religious use.

Table 1 : Cannabis Users And Their Motivational Factors

Motivational Factors	Cannabis Users Number (%)
Sociability	4 (13.3%)
Pleasure and Intoxication	22 (73.3%)
Stress, Strain and Boredom	9 (30.0%)
Religious	9 (30.0%)
Crime	1 (3.4%)

50 % of subjects were bhang users as against 43.5% who smoked ganja. Only 6.5 % preferred any cannabis preparation.

Table 2 : Cannabis Use (Type Of Preparation)

Preparation Used	Users Number (%)
Bhang (Exclusively)	11 (36.6%)
Ganja (Exclusively)	10 (33.4%)
Charas (Exclusively)	0
Usually Bhang, Occasionally Ganja/Charas	4 (13.4%)
Usually Ganja, Occasionally Bhang	3 (10.0%)
Any cannabis preparation available	2 (6.6%)
	30 (100%)

60% preferred to take cannabis while alone and 40% while they are in company.

Chronic use of bhang for an average period of 11 years could result into schizophrenia like symptomatology (26.7) and equally MDP-like symptomatology (30 %) . similarly ganja smoking for an average period of 7 years could result into schizophrenia like clinical picture (20%) . thus it is obvious that clinical presentation had no specific relationship with the type of cannabis preparation used.

All subjects included in this study were using cannabis almost daily at least once.

Table 3 : Personality Types Of Cannabis User Psychiatric Patients

Personality type	Cannabis users (Paranoid Schizo. Type) N=15	Cannabis users (MDP Type) N=15	Total (%) N=30
Schizoid	6 (40%)	0	6(20%)
Paranoid	4 (26.70%)	0	4 (13.3%)
Antisocial	4 (26.70%)	4 (26.70%)	8 (26.70%)
Explosive	1 (6.60%)	0	1 (3.3%)
Cyclothymic	0	6 (40.0%)	6 (20.0%)
Hysterical	0	3 (20.0%)	3 (10.0%)
Inadequate	0	2 (13.30%)	2 (6.7%)
Total	15 (100%)	15 (100%)	30 (100%)

Table – 3 shows the personality of the cannabis users divided into two groups as per the clinical symptoms, paranoid schizophrenia group 1 and Manic-Depressive Psychosis Group 2.

DISCUSSION:

Present study shows the adverse effects of cannabis use, wide range of psychopathological conditions, including depressive, bipolar and less consistently anxiety disorders are significantly associated with incident cannabis use and progression to cannabis use disorder. [1]

Patients with Increasing cannabis use were found to be with increased risk of leaving school without qualifications, failure to enter higher education and failure to obtain a degree. The association between cannabis use and poor performance at school and college is significant problem. [2]

Cannabis users were found to have low attention span, reduced memory quotient and autistic thinking, which is consistent with previous studies. Adolescents who were regular cannabis users (more than once a week) had a significantly poorer performance on four measures of cognitive function reflecting attention, spatial working memory and learning.[3]

While this study found that cannabis use was associated with the spectrum of adverse effects, some other studies do not support this hypothesis which assumes that specific substances should be particularly associated with specific psychological characteristics or vulnerabilities.[4]

Results of this study indicated towards the prevalence of early onset of Bipolar Disorder and Suicide Attempts in cannabis users, it is consistent with previous studies. [5]

Cannabis use was associated with the violent behavior and short temperedness , as shown in some previous studies this finding point to multi-causal explanations, drug abuse appear to play a significant role in explaining violence. Previous data suggests that cannabis could have a specific role in the development of violent behaviour and that detection of it should be considered in criminal responsibility evaluation.[6,7]

Present study also highlights that patients already having schizotypal and paranoid personality are at high risk to experience psychosis-like phenomena at the time of cannabis use.[8]

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