

Cannabis induced psychosis – A Phenomenological perspective

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Abstract: Cannabis abuse is a growing health concern. Cannabis dependence is associated with two-fold increase in psychotic symptoms. The current study is an attempt to highlight the phenomenology of cannabis-induced psychosis and its temporal correlation with heavy cannabis intake in 20 patients of cannabis dependence syndrome. The mean age of the patients was 24 years with average duration of 4 years for cannabis abuse. The average interval between heavy cannabis intake and psychosis was 24-48 hours. Majority of the patients had delusional thinking (90%), followed by delusion of grandiose identity of Lord Shiva (65%), delusion of persecution (60%) and reference (30%).

Key words: Cannabis, psychosis and phenomenology

INTRODUCTION

There has been a recent increase in the use of cannabis in many developed societies.¹ Recent studies suggest that up to two-thirds of young people use cannabis at least once, with nearly 10% developing cannabis dependence.^{2,3} The increased use of cannabis has led to growing research interest to study the effects of heavy use of cannabis on health.⁴ The most heated debates in cannabis research is the possibility of existence of distinct nosological entity i.e. cannabis psychosis. In fact the existence of this entity has been dismissed by various authors for the poor quality of information on cannabis use, temporal correlation, premorbid and family history.⁵⁻⁸ However, there are number of case reports in the literature showing evidence of 'cannabis induced psychosis' describing the ways in which the onset of psychotic episodes was preceded by the heavy use of cannabis.⁹ A study has shown that cannabis psychosis is to be short lasting with predominant polymorphic picture, presence of more odd and bizarre behaviour, violence, panic attacks with reactive and congruent affect and less evidence of

schizophrenic formal thought disorder and generally there is complete recovery as compared to schizophrenia.¹⁰ It means that cannabis psychosis is an independent entity. However, cannabis use is associated with an increased risk of experiencing schizophrenia like symptoms, even after psychotic symptoms preceding the onset of cannabis use are controlled for, indicating that cannabis use is not secondary to a pre-existing psychosis.¹¹ In a study the authors reported a comparison of 15 "bhong" users with psychotic symptoms with 10 bhong users without psychosis and found that the patients of bhong users with psychotic symptom were more likely to be uncooperative and had symptoms of excitement, hostility, grandiosity, hallucinations, disorientation and unusual thought content.¹²

A retrospective study compared the prevalence of hallucinations, delusions and hospitalizations between the active cannabis users and psychotic patients who had never used cannabis.¹³ There was high rate of continuous hallucinations and delusions, and more hospitalizations among active cannabis users.

Psychiatric disturbances associated with cannabis use range from minor psychological responses such as anxiety and panic attacks ¹⁴, depressive disorders ¹⁵ to more serious mental illnesses such as the putative cannabis psychosis ¹⁶, acute functional psychosis ¹⁷ and poorly validated entity of “amotivational syndrome” ¹⁸.

Whilst considerable attention has been paid to the association between cannabis use and psychotic disorders ^{10,19,20} relatively little is known about the impact of cannabis abuse on phenomenology of psychotic symptoms. Moreover there is no clear cut time interval between heavy cannabis intake and onset of psychosis. So, this study is an attempt to evaluate the hypothesis that heavy cannabis use is associated with psychosis having distinct phenomenology and it is closely associated with heavy cannabis intake. The study was planned with the aims:

1. To study the clinical presentation and phenomenology of cannabis induced psychosis.
2. To study the temporal correlation between heavy consumption of cannabis and onset of psychosis.

METHODOLOGY

A total of 20 patients who visited the psychiatry department, Government Medical College & Hospital, Sector-32, Chandigarh were included in the study

Inclusion Criteria : 1. Patients fulfilling the criteria of DSM-IV ²¹ for cannabis-induced psychosis-[ICD-10 also has similar information under the heading of substance induced psychotic disorder (F12.5)]. 2. Recent use of cannabis i.e. within past 30 days. 3. Age 18 or more.

Exclusion Criteria : 1. Patient with history of past psychiatric illness. 2. Patients having co-morbid

psychiatric illness, co-existing personality disorder and consumption of substance other than cannabis. However, nicotine use was not the exclusion criteria. 3. History of psychiatric illness in family. 4. Mental retardation and other organic disorders.

Table 1

Socio-demographic and clinical variables

| Variables | Mean (Years) | Range |
|-------------------------------------|--------------|-----------------|
| Age of patient | 24 | 18-35 years |
| Education | 10.1 | 8th - 12th |
| Age of onset of cannabis use | 18.9 | 15-27 years |
| Duration of continuous cannabis use | 4 | 2 days-20 years |

Table 2

Temporal correlation and phenomenology

| Phenomenological variables (n=20) | Percentage |
|---|--|
| Delusional thinking | 90 |
| Delusion of Grandiosity | 75 (65% had delusion of Bhola Shankar) |
| Delusion of persecution | 60 |
| Delusion of reference | 30 |
| Interval between heavy consumption of cannabis and onset of psychosis | 24-48 hrs. |

RESULTS

All the patients were male; in the age group of 18-35 years and majority were matriculate. The mean age of starting cannabis was 18.9 years and mean duration of cannabis use was 4 years (range 2 days – 20 years).

Out of the 20 patients, 40% (n=8) gave recreational and experimental reasons for using

cannabis; another 40% cited peer pressure and 20% used it for elevation of mood.

Display of abnormal behavior in the form of violent and aggressive behavior, excessive talks observed by family members were the reasons for establishing contact with the clinical services in all the cases. The treatment lag i.e. time period between onset of psychosis and seeking help was 6.5 months (Mean). Out of 20 patients, 85 % (n=17) required hospitalization for the control of symptoms and rest were managed on OPD basis only. There was an average gap of 24 to 48 hours between heavy cannabis intake and onset of full-blown psychosis.

On Mental State Examination, it was noticed that delusional thinking was present in 90% of cases; delusion of grandiosity was present in 75%, followed by persecutory (60%) and referential (30%) delusions. Out of patients reporting delusions of grandiosity, 65% cases showed distinct over-religiosity with content related to Bhola Shankar Nath (Lord Shiva). However, none of patients reported any cognitive deficits i.e. disorientation to time, place, person and forgetfulness. All the patients recovered completely with antipsychotic treatment within one month.

DISCUSSION

The findings of current study suggest that all these patients did not have any past or family history of psychosis and might not have developed psychosis if they had not used cannabis. It means that cannabis psychosis is an independent entity and which has been reported by other authors too^{9,10,16,19,20}. The finding that 20% of patients who restarted cannabis again developed cannabis psychosis, further substantiates the diagnosis.

Majority of the patients were younger and required hospitalization for control of psychotic symptoms, and recovered completely with

achieving abstinence or with anti-psychotic treatment which is in accordance with other studies^{10,22,24}.

It has been mentioned in the literature that psychosis develops after heavy intake of cannabis but exact temporal relationship has not been defined^{5,10,16,19,20}. In the current study, the authors found strong correlation between heavy dose of cannabis and onset of psychosis with the average gap of 1-2 days without any signs of confusion or disorientation. Out of the total sample, 75% (n=15) of patients had manic symptomatology in the form of delusions of grandiosity (over-religiosity), and out of that, 65 % of patients had delusional identity of Bhola Shankar (Lord Shiva). None of the patient showed any formal thought disorder.

The current study showed predominantly manic symptomatology, which is similar to some earlier studies^{19,23} but contrary to few studies^{14,15}. The distinct delusion of identity of Bhola Shanker is reported first time in this study only. The following may be possible reasons for this- firstly; all the patients were Hindu and had belief in Shiva Bhakti. Lord Shiva is a Hindu god and synonymous with power and fulfilling the desire of devotee easily. Secondly; bhang (cannabis) is used as Prasad (holly sweet) in Shiva temple and bhang is religiously associated with Shiva bhakti. This might be a possible reasons for the delusional identity with Lord Shiva, that god had given them special power for their worship. Probably this is why we do not see too many patients of cannabis abuse from other religious communities. Additionally, 60% of the patients had referential delusions and 30% had auditory hallucinations (commanding type), which is similar to another study¹².

Limitations of the present study are, it was a retrospective analysis and no formal assessment was done for severity of dependence.

Sample size was small.

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