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Mental Health and Cannabis Abusers of Kashmir Valley

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Abstract

The present study is carried out to explore the Mental Health of the Cannabis Abusers and Non Abuser of Kashmir valley. The sample consisted of 100 male respondents; of these 50 were cannabis abusers and 50 non-abusers were taken into consideration. The results of study showed that the two groups significantly differed on all the sub scales of mental health. Cannabis abusers showed higher level of anxiety, depression, and loss of behavioural/emotional control, psychological distress, and have showed lower levels of life satisfaction and mental health index scores in comparison with non-cannabis abusers.

Keywords: Mental health; Cannabis; Anxiety; Psychological well-being; Life satisfaction

Introduction

Cannabis and other illicit drug abuse in young people is a significant public health concern across India and the rest of the world. Cannabis abusers had the longest duration of drug use but the lowest rate of drug dependence (29.9%) and lowest rate of multiple drug abuse (6.1%), whereas heroin abusers had the highest rate of drug dependence (88.8%) and highest rate of multiple drug abuse (83.4%). More than 50% of drug abusers had impairment in health and psycho social status. Problems with relatives or acquaintances led to treatment contact in about 52% of patients. Other socio-demographic variables such as marital, educational or occupational status did not reveal any significant difference. According to a survey sponsored by United Nations Drug Control Programme (UNDCP) there are 70000 drug addicts in Kashmir division alone including 4000 women? As per recent survey, 65 to 70% students in Kashmir are drug addicts who include gateway drugs too and around 26% female students. As per Government Psychiatric Disease Hospital (GPDH) statistics 90% abusers belong to the age group of 17 to 35 years with a lifetime prevalence of drug addiction. According to reports of Drug De-addiction and Rehabilitation Centre Police Control Room Srinagar Kashmir the total number of OPD drug users seen from (DDRC PCR February 2008 to December 2016) is 15294 and were diagnosed with the help of 1CD-10 classification among them (472 patients were alcohol users (F_{10}), (1359 patients were opioid users (F_{11}), (7860 patients were cannabis users (F_{12}), (1080 patients were benzodiazepine users (F_{13}), (352 were cocaine users (F_{14}), (460 patients were volatile users (F_{18}) and (3741 patients were multiple drug users (F_{19}). The total number IPD drug users were rehabilitated are (1332) among them (90 patients were alcohol users (F_{10}), (235 patients were opioid users (F_{11}), (275 patients were cannabis users (F_{12}), (222 patients were benzodiazepine users (F_{13}), (25 were cocaine users (F_{14}), (165 patients were volatile substance users (F_{18}) and (330 patients were multiple drug users (F_{19}). Mudasir [1] in his study concluded 166 respondents revealed that both unemployment and conflict are responsible for drug addiction among youth. More shockingly 72.36% male and 57.14% female respondents revealed that girls also take drugs; so far hardly any study had been done about female and their addictive approach. 56 respondents who are smokers and 33 respondents who are not smokers feel educational stress is other reason for youth to indulge into drug addiction. Tahira et al. [2] in her study concluded that 94.17% respondents are not aware of the process of drug de-addiction. Only 3.4% respondents know about the NGO(s) working in the field of drug de-addiction and only 5.4% respondents know about the drug de-addiction centre(s) present in Kashmir valley. Looking into the importance of mental health in relation to the cannabis abuse and provide an integrated assessment picture of young people's cannabis abuse and its consequences on Mental Health among Kashmiri cannabis abusers.

Literature review

Cannabis commonly called marijuana is the most used proscribed substance in the world [3]. Cannabis comprises more than 60 naturally occurring cannabinoids. It contains a psychoactive ingredient namely delta-9-tetrahydrocannabinol that elicits anxiety symptoms through dys-regulation of anandamide (an endogenous cannabinoids) effecting serotonin, noradrenalin, GABA and glutamate especially among individuals vulnerable to developing anxiety [4,5]. Cannabinoid receptors are found in high density in the hippocampus, prefrontal cortex, anterior cingulate gyrus, basal ganglia and cerebellum. The endocannabinoid system is concerned directly or through other neurotransmitters such as dopamine and glutamate in the development of mental illness and there is greater memory loss and hippocampal volume change in healthy adolescent cannabis users over non-users [6]. The endocannabinoid system has an inhibitory effect on neurotransmitter release and exogenous cannabinoids disrupt this system and leads to excess glutamate release. Excitotoxic effects influences post-synaptic pruning, which in turn has negatively influence on adolescent experience-dependent maturation of neural circuitry within the prefrontal areas. Functional imaging studies showed lower activity levels and reduced volumes of the hippocampus, prefrontal cortex, cerebellum and amygdale in chronic cannabis users [7]. The effects of cannabis in adolescent's psychosis are primarily related to functioning of the left parietal lobe and to a lesser extent the left thalamus [8]. The regular use of cannabis with a higher THC content and a lower CBD concentration may increase the risk for schizophrenia and lower the age of onset of the disease [9,10]. Regular cannabis use has been reported to be more common among persons with schizophrenia [11]. Cannabis users have decreased serotonin and increased norepinephrine transmission leading

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to mood disorders and have greater long-term susceptibility to stress [12]. Cannabis intoxication is accompanied by perceptual disturbances, magical thinking, environmental and social factors which influences on personality characteristics, anxiety, mood and neurobiological disorders [13]. Literature revealed that 181.8 million people aged 15-64 years used cannabis for nonmedical purposes globally [14]. National Co-morbidity Survey found that 90% of cannabis-dependent individuals had lifetime co-morbid psychiatric disorders [15]. Cannabis use is associated with the use of other substances including cocaine, hallucinogens, ketamine and prescription drugs [16,17]. Findings of high prevalence of comorbid cannabis use and depression have been replicated in many large-scale cross-sectional studies and in mental health surveys. Persons with cannabis-use disorders have higher rates of depressive disorders [18]. In longitudinal studies, the relationship between regular cannabis use and depression has been much weaker than that for cannabis and psychosis [19,20]. The twins who had used cannabis prior to age 17 were more likely to have used other illicit drugs than the co-twin who had not. This relationship persisted after controlling for non-shared environmental factors [21]. Similar results have been reported in discordant twin studies in the USA [22] and Netherlands [23]. The psychotic symptoms or psychotic disorders were seen higher in regular cannabis users than in non-users [24]. Persons with cannabis-use disorders also have higher rates of anxiety; conduct disorders, eating disorder and personality disorders [25]. The Genetic epidemiological studies have assessed the degree to which shared genetic risk factors may explain the association between cannabis use and psychoses. These have included studies of sib-pairs [26], studies of the strength of the relationship between cannabis and psychosis in persons who differ in genetic relationship [27] and correlations between polygenic risk scores for schizophrenia and cannabis use in large twin samples [28]. These studies suggest that shared genetic factors may explain some but not all of the association between cannabis and psychosis. A case-crossover study was conducted on 363 persons who had recently attempted suicide and were treated in a trauma hospital for a suicide attempt within the previous 24 hours in the state of Mississippi, USA. The researchers compared rates of cannabis use in the 24 hours leading up to the suicide (case period) to that in the 24 h of the day before the suicide (control period). They found that 10.2% of suicide attempters had used cannabis in the case period while 13.2% used cannabis in the control period. In general, 9.5% of all toxicology reports for deaths by suicide showed the presence of cannabis use [29]. Never the less rates of regular use of smoking and psychoactive drugs among people of Jammu and Kashmir, hit the highest point. Cannabis was the commonest substance abused, followed by heroin. As well as important health risks associated with cannabis use, broader impacts on society extend to healthcare costs, risk of infectious disease, crime and antisocial behaviour, all of which highlight the need for prevention strategies. Policy continues to be largely focused on smoking, drinking and drug use as separate issues, while research showed that these are often inter-related. Youth of Kashmir consistently reported that they continued to have serious psychological and social difficulties as a result of the ongoing violence and deprivation they had experienced during the last few years, such as feelings of hopelessness and profound social alienation. Many young men and women try to overcome their disappointment, stress, depression by shifting to different drugs. Most of the drug abusers were male, the majority (57.2%) being in the 26-35 age group. This study will help to improvise the greater understanding of cannabis abuse and its consequences on mental health aspects of Kashmiri youth and will help to inform the development of relevant and appropriate educational programmes and materials for use within the school setting, as well as identify gaps in the current literature.

Aim

The aim of the present study is to analyze the differences on Mental Health Inventory applied to a sample of 50 Cannabis Abusers and 50 Non-Abusers Kashmiri youth men.

Hypothesis

There will be significant difference between all the sub scales of mental health viz., anxiety depression, loss of behavioural/emotional control, general positive affect, emotional ties, psychological distress, psychological well-being, global scales and mental health index in cannabis abusers and non-abusers of Kashmiri youth men.

Methodology

Sample

The sample consisted of 100 respondents. Of these, 50 were cannabis Abusers remaining 50 were Non-cannabis Abusers. The age of the respondents ranged between 21-30 years. The Cannabis Abusers were selected from Drug De-addiction and Rehabilitation Center Police Control Room, Srinagar Kashmir, where as Non-abusers were randomly selected from various colleges of Kashmir valley. Only males were taken for the study.

Tool used

Mental Health Inventory (of the statistical center Rand-Research and Development) includes 38 items developed by Veit and War is used in the present study in which the respondent uses a 6-point Likert-style response and it can generally be done without help. The test takes approximately 5-10 min to administer.

Results and Discussion

The t-test was applied to the obtained data to analyze the significance of a difference between the two groups, Cannabis Abusers and Non-Abusers Kashmiri youth men on mental health inventory (Graph 1 and Table 1).

The results showed the values of anxiety; depression, loss of behavioural and emotional control is higher for the abusers group then those of the non-abusers group. Coherently, the levels of the positive effects, the emotional ties and life satisfaction are higher in the non-abusers. The "t" value on all the sub scales showed significant difference at (P<0.01).

Cannabis abusers showed higher scores in anxiety sub scale of mental health inventory (M=38.66) in comparison of non-abusers (M=21.1). The higher THC content can increase anxiety, depression and psychotic symptoms, and can increase the risk of psychotic symptoms, dependence and increase adverse effects on the respiratory
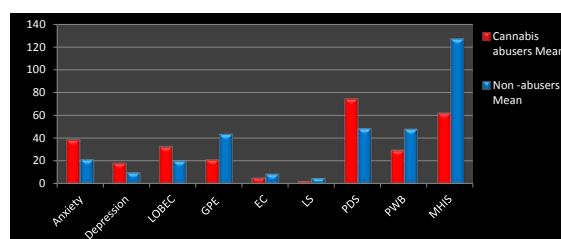
Graph 1: Depicts mean values of cannabis abusers and non-abusers on MHI-38.

Mental health subscales	Cannabis abusers		Non-abusers		
	Mean	SD	Mean	S.D	t-value
Anxiety	38.66	10.00	21.66	8.95	6.96 **
Depression	18.43	2.16	10.04	4.03	10.05 **
Loss of behavioral/emotional control	32.63	12.33	20.26	6.59	4.85 **
General positive effect	21.2	7.23	43.93	9.81	10.23**
Emotional ties	5.3	2.10	8.83	1.98	6.71 **
Life satisfaction	2.4	0.67	5.1	0.88	14.43**
Mental health global scales					
Psychological distress	74.5	31.98	48.8	18.01	3.83**
Psychological well being	29.56	9.05	48.3	14.93	5.89 **
Mental health index score	62.13	17.72	127.73	45.21	7.29 **

Table 1: Depicts the mean SDs and t-values on (MHI-38) in cannabis abusers and non-abusers of Kashmiri valley.

and cardiovascular systems in regular users [7,30]. Anxiety disorders in adolescence may predict later cannabis use disorder but anxiety disordered patients make use of cannabis as a form of self-medication [31]. Cannabis use among anxiety disorder patients reflects a specific genetic vulnerability. However, both psychotic subjects and their relatives have been shown high rates of cannabis use [32]. In context of depression sub scale of mental health inventory cannabis abusers showed higher scores (M=18.43), as compared with non-abusers (M=10.04). Literature revealed Marijuana users have higher levels of depression and depressive symptoms than those who do not use marijuana [33,34]. Marijuana dependency is linked with major depressive disorder and later leads to suicidal ideation and suicide attempts [35,36]. In perspective of Loss of Behavioural/Emotional Control sub scale of mental health inventory cannabis abusers showed higher scores (M=32.63) than non-abusers (M=20.26). The addicted brain is in a condition of chronic dys-regulation, on zenith of these, dys-regulation of the frontal cortex which is supposed to accomplish thoughts, impulses and emotions results in compulsive drug seeking and loss of control over intake [37]. In context of general positive affect sub scale of mental health the non-abusers showed higher scores (M=43.93) than cannabis abusers (M=21.2). On the other hand, evidence of early researches showed contradictory results with present study that the adolescents and undergraduates lie when they declare that they use marijuana to reduce negative wellbeing [38] and promote positive well-being [39]. In emotional tie sub scale of mental health inventory, the cannabis abusers showed lower scores (M=5.3) in comparison of non-abusers (M=8.83). Those child's from non-intact families, those who were not satisfied with their relations with their fathers or mothers and those who were less closely monitored, were more likely to be heavy substance users [40]. Psychological predictors of marijuana use include poor control of emotions, poor coping skills, low self-concept, deviance, rebelliousness, and an inability to be empathetic with others [41]. During the present study the non-abusers showed higher scores (M=5.1) than cannabis abusers (M=2.4) in perspective of life satisfaction sub scale of mental health inventory. Early regular cannabis use is associated with diminished life satisfaction, higher likelihood of developing cannabis use disorder, and increased risk of developing mental health problems [42]. However, a longitudinal study found that adolescent cannabis use was linked to a greater risk of major depressive disorder and lower life satisfaction [43].

In the present study cannabis abusers showed higher scores (M=74.5) in contrast with non-abusers (M=48.8) on psychological distress in global sub scale of mental health inventory. A recent study confirmed that cannabis dependence in adolescents is related to increased psychological distress and anxiety levels [44]. In the framework of psychological wellbeing global sub scale of mental health

inventory the cannabis abusers showed lower scores (M=29.56) than non-abusers (M=48.3). Marijuana use is associated with negative well-being however the strength of this relationship is inconsistent across studies [45,46]. Some studies report that marijuana users have increased positive well-being compared to non-users, but heavy consumption is associated with negative well-being [24,47]. In relation with mental health index the non-abusers showed higher scores (M=127.73) in contrast with cannabis users (M=63.13). However lower mental health index ratio indicates that the cannabis abusers are more associated with mental health issues. Cannabis use is associated with manic or hypomanic episodes and negatively affects memory, attention span and psychomotor performance, reduce motivation, learning performance and work or study [48]. Frequent cannabis use is associated with mental illness and has estimated that the cannabis users have 40% higher risk of psychosis than non-users [49]. As intervention techniques are linked to constructive outcomes in cannabis addiction in youth, it is necessary for clinicians to use evidence-based psychological interventions to treat cannabis use disorder.

Conclusion

During the present study it was seen that cannabis abusers are more prone to mental health disorders and health related issues. Cannabis abusers have higher level of anxiety, depression, loss of behavioural/emotional control and psychological distress and have lower level of emotional ties, life satisfaction and general positive affect. As with other substance-use disorders, relapse after cessation of cannabis use is common. It is suggested that to reduce the chances of relapsing to cannabis use and dependence, attention is seeking to the risk and protective factors associated with drug use may be useful. Analyzing the risk factors for adolescents include conflict in the family and friends who use cannabis. Indulge the protective factors in adolescence include a positive relationship with parents, which provide structure and boundaries, a positive school environment, and engagement in activities that provide meaning [3]. Keeping in view the protective factors in adulthood include employment, housing and social support and gratify the risk factors include untreated mental health conditions. Mental health professionals should endow with psychological therapies such as motivational assessment therapy, spiritual therapy, yoga, meditation, group therapy, family therapy and cognitive behavioural therapy in advance appraise on the mental health problems and deviant behaviors of the addicted group. The religious leaders and society committees should take serious measures against drug peddling and usage of psychoactive substances in the societies by taking the assistance of J&K police department and collaborative drug de-addiction and rehabilitative centers to save the youth of the valley. The government and non-government organization must take prolific steps in construction

of new Drug De-Addiction and Rehabilitation Centers for both the genders and should formulate strategies of making seminars, debates, rallies and mental health programmes in every corporate So that awareness spreads among the common masses of Kashmiri valley. Now it would be more important for the government of J & K to engage the psychologists/counselors in education sector to assist the students in enhancing personality development and determining their future.

Acknowledgement

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