Journal of Medical Sciences

ISSN 1682-4474

science alert

ANSInet
an open access publisher
http://ansinet.com

Case Report

JMS (ISSN 1682-4474) is an International, peer-reviewed scientific journal that publishes original article in experimental & clinical medicine and related disciplines such as molecular biology, biochemistry, genetics, biophysics, bio-and medical technology. JMS is issued eight times per year on paper and in electronic format.

For further information about this article or if you need reprints, please contact:

P. Bamigboye Abiodun
Department of Community Health,
Faculty of Clinical Sciences,
Obafemi Awolowo University,
Ile-Ife, Nigeria

Tel: +234 803 700 2955

J. Med. Sci., 7 (6): 1068-1072
15th August, 2007

Pattern of Marijuana Use among Male University Students: A Case Study

[1]P. Bamigboye Abiodun and [2]A.M. Afolayan

An assessment of the pattern of use of marijuana among undergraduate students of Obafemi Awolowo University, Ile-Ife, Nigeria was carried out in 2004. The study which was descriptive focused on male students of the university using a set of structured, self-administered questionnaire. Four hundred study subjects were selected from the three male halls of residence through systematic sampling. Only 81 (20.3%) of the 400 selected subjects self-reported the use of marijuana while the remaining 319 (79.7%) were not using the substance. The use of the substance was commonly reported among students age 20-24 years. The prevalence of use among the study population was observed to be lower than 33% recorded in 1981 in the same university. Mean daily reported consumption among the users was 2.27 wraps and the use was common among students residing in Awolowo Hall of the university. A significant relationship exist between use status and respondents opinion as to whether its use should be discouraged or not and the pattern of use was observed to be related to economic status of the students in relation to how much money they had to play with monthly. The paper solicited for youth friendly approaches within the universities through which young people could be assisted in imbibing positive values about life.

Key words: Marijuana use, university students, deviant behavior, positive values

ANSInet
Asian Network for Scientific Information

[1]Department of Community Health, Faculty of Clinical Sciences,
Obafemi Awolowo University, Ile-Ife, Nigeria
[2]Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria

INTRODUCTION

One of the current challenges of Public health in many part of the world is the problem of controlling the abuse and misuse of substances that have been classified as drugs or narcotics. These substances include cocaine, heroine, marijuana and some others which are generally called recreational drugs. The problem of marijuana abuse has been noted in almost all the countries of the world though in varying proportion and dimension (Affinnih, 1999; Ariel *et al*., 2004; Presley, 1996; Bachman, 2003). Ariel *et al*. (2004) refers to a UN estimate that at least 2.5% (about 141 million) of the world population use marijuana. It has been particularly observed that the consumption is higher among young people with increasing tendency to extend more to the adolescent age group (Bachman *et al*., 1996; Abbey, 1991; Rudgley, 1998).

Different reasons have been adduced for using marijuana but not much has been documented as regards the pattern of its use among younger population age group and in particular among would be future leaders who are undergoing one form of training or the other especially in higher schools. Institutions of higher learning have become significant in modeling behavior among young people. It is a place where positive values are expected to be learnt as a way of preparing young ones for their future roles. It has also been noted that some negative values and practices could also be transmitted as part of the learning that takes place in these institutions.

In Nigeria, the problem of marijuana use appears to be on the increase judging from both newspaper reports as well as clinical and epidemiological surveys (Olatawura, 1981). An earlier study carried out in 1981 among male university students in the same university found out that 33% of the students were using marijuana. Apart from alcohol and cigarette, marijuana is the most popularly used drugs in many parts of Nigeria and its use has been noted to be gaining ground among young people (Morakinyo, 1983). Many Public Health professionals have expressed concern about the level of drug related problem affecting young people in Nigeria in recent time. In the US, studies have shown that many of the young ones get into using the substance out of curiosity and peer pressure. The picture is not too clear in Nigeria.

Marijuana use in some places is commonly associated with non-conformity, deviant behavior, disoriented behavior, poor academic performance and a cause of family disharmony (Affinnih, 1999; Cesar, 2004; Cannabinews, 2000; NIDA, 1998).

The health effects of marijuana is believed to be incalculable. Its use has been known to be linked with short term damage to the memory, distortion of perceptions, impairment of judgment and complex motor skills, alteration of heart functions and a high potential of causing severe anxiety paranoid and lethargy (Affinnih, 1999; Bachman *et al*., 2003 Cesar, 2003; Rudgley, 1998; Olatawura, 1981; Wu *et al*., 1988; Tashkin and Clark, 1987; Klein *et al*., 1998; Fleigiel *et al*., 1997; Wenger and Croix, 1992; Chait and Pierri, 1992; NHSDA, 2002; Bell *et al*., 1997; Grant and Dawson, 1998; Anthony and Pretnonis, 1995; Gfroer and Epstein 1999; NIDA, 1998; Verma *et al*., 2002; Thornicroft 1990; Van Teijlingen, 1997).

Its link with schizophrenic conditions has also been documented (Van Teijlingen, 1997). These adverse effects not withstanding, many young people have not considered it necessary to quit the practice. It is with this mindset that this study was carried out to assess the prevalence of use, describe the pattern of use of the substance and identify the factors influencing its use as well as the attitude of the students to its continued use.

MATERIALS AND METHODS

This study was carried out between February and November 2004 at the Obafemi Awolowo University, Ile-Ife in the south-western part of Nigeria where a similar study was carried out in 1981. The University which has been existing for about 40 years has a student population of about 28,000 as compared to about 12,000 student population in 1981. It is a residential university in which more than half of the student population resides on the campus although under very harsh conditions of overcrowded rooms and associated poor sanitary conditions. Various social activities takes place on campus especially at night including the use of alcohol and other narcotics.

The study which was designed a descriptive study focused on the male undergraduates. Male students that constituted the study subjects were selected from each of the three main male halls of residence/hostels (Fajuyi, Awolowo and Angola halls). These halls of residence are located centrally within students' living area of the campus. Awolowo hall which accommodates mostly older male students is noted for various kinds of students activities and as a matter of fact, it is more oftentimes referred to as the hotbed of student union and other social activities. Angola hall accommodates mostly newly admitted male students and by virtue of its proximity to Awolowo hall, the activities for which Awolowo hall is noted for, has been observed to be

manifesting among residents of the hall. Fajuyi hall is less prone to such activities and accommodates equally matured students including those in departments in which the students have a lot to read more than other students. A structured, self-administered questionnaire consisting of both open and closed ended questions was administered on every third students coming into the hostel through the major entrances to the halls of residence. Based on the students population in each of the halls of residence, 150 questionnaire were distributed each in Fajuyi and Awolowo halls while 100 questionnaire were distributed in Angola hall making a total of 400 study subjects included in the present research.

RESULTS AND DISCUSSION

Out of a total of 400 male students interviewed, 294 (73.5%) of them were of the age group 19-25 while 68 (17%) were above 25 years old. From all the respondents, 81 (20.3%) were using marijuana while 319 (about 79.7%) do not use the substance.

A lower prevalence of 20.3% was observed among the study population as compared with 33% recorded in, 1981 in a study among students of the same university (Morakinyo, 1983). This prevalent rate is similar to that observed among similar population in studies conducted in the United states (Presley *et al*., 1996; Cannabinews, 2000; Grant *et al*., 1998). The factors responsible for this decline may not be easily understood but one may be curious to note that by and large use of the substance is still outlawed in the country. However, the reasons for this decline could be subject for further studies. When users of the substance were asked as regards the regularity of use of the drug, 33 (40.7%) of them reported they use the substance regularly while the remaining 48(59.3%) reported occasional use of the substance. The reported quantity (in wraps) of the substance that is consumed daily by the regular users is as contained in Table 1.

From Table 1. it is obvious that among the 33 users that answered the question on how many wraps of the substance is consumed daily, the mean daily consumption is 2.27 wraps (standard deviation = 1.28). Larger proportion (45.5%) of those that answered the question use only one wrap daily suggesting that the users may not have become ardent or chronic users which could be considered as an opportunity for success in the initiation of early control programme.

The hall of residence in which the students reside and economic viability in term of income level are major factors influencing the pattern of use of the substance. Majority of the users (40.7%) resides in Awolowo hall and this is closely followed by Angola (33.4%) which houses mostly new male students in their first year in the university (Table 2). A significant relationship exist between halls of residence and use status ($p<0.05$) thus reinforcing the observation made in Maryland (Cesar, 2004) In the light of this special attention would need to be focused on Awolowo hall and others especially in the areas of youth oriented activities aimed at character modeling.

This is important so that Awolowo hall residents would not be agents of influencing residents of other halls and the larger university community especially newly admitted students with such deviant behavior and practices.

Economic status of respondents based on how much money they have as pocket money/income per month was a major factor influencing the use of the substance (Table 3). Users with at least N4,000 (about USD 30) per month pocket money constitute the highest (51.9%) of all the users while the number of users equally decreased with decreasing monthly income. It could be inferred that affluence seem to be synonymous with the use of the substance as the 'rich' students seem to be more involved than the poor. This is not too surprising as the substance itself is not really cheap and easily affordable thus making it more accessible only to the rich. Efforts that would be directed towards addressing the problem must take into cognizance this factor with a view to encouraging the users on the best ways to use their money.

Like the findings of similar studies (Cesar, 2004; Bell *et al*., 1997), most of the users of the substance (76.5%) are young ones between the ages of 20 and 24

Table 1: Number of wraps of Marijuana consumed on daily basis by regular users

No. of wraps/day	Frequency	%
1	15	45.5
2	3	9.1
3	6	18.2
4	9	27.2
>4	0	0.0
Total	33	100.0

(Mean daily consumption is 2.27, Standard deviation = 1.28)

Table 2: Distribution of users of marijuana based on their hall of residence

Hall of residence of users	Frequency	%
Fajuyi	21	25.9
Awolowo	33	40.7
Angola	27	33.4
Total	81	100.0

Table 3: Average monthly monetary allowance of students using marijuana

Range of monthly allowance (Naira)	Frequency	%
1000-2000 (USD7-15)	6	7.4
2000-3000 (USD15-20)	12	14.8
3000-4000 (USD20-30)	21	25.9
Above 4000 (>USD30)	42	51.9
Total	81	100.0

while consumption is lowest among male students less than 19 years old (Table 4). However, this observation was not statistically significant ($p>0.05$). The 20-24 year old students constitutes mostly students who had been in the university for at least two or more years and the possibility of their 'infecting' others with this practice may be high. With the mean age at first use of the substance being 17.2, (standard deviation = 1.67), the possibility is there that most of the users must have started the use of the substance before being admitted into the university, a situation that suggest that lower levels of education had not taking cognizance of the need to prevent such deviant behavior.

As regards the attitude of the users to the use of the substance, all the users except 9 (11.1%) who were indifferent to the use of the substance claimed that the use is acceptable to them as opposed to only 12 (3.8%) of non-users who claimed that the us was acceptable (Table 5). This is not surprising since users of such substances are known to be deriving some benefits from its consumption and would normally accept its use. The use of the substance is not acceptable to 231 (72.4%) of non-users, while 76 (23.8%) of the non users has an in different attitude to its use and/or acceptability. This latter category may have to be given special attention in preventive programme effort so as to ensure that they do not eventually accept its use and thus become users as well. Among both users and non-users however, a higher percentage (57.8%) would still not accept the use of the substance thus raising the hope for possible eradication of the practice among the students if appropriate action could be taken to put it under control. This fact corroborates those expressed by some youths in the American study where they expressed their non-approval and also suggested that its use be outlawed (Cannabinews, 2000).

When asked of their future plan as regards the use of the substance, only 63 (77.8%) of the users would also want to continue with the use while only 18 (22.2%) may consider quitting the use in future. The category of those that may consider quitting the practice though small could be very significant in achieving behavior modification among their peers. This is possible because they are probably the non-ardent users who could easily be persuaded to discontinue its use and could also be used to encourage others ardent ones to consider quitting the practice.

As to whether the use of marijuana be discouraged or not, all the users objected to its being discouraged while 237 of the non users (78.2%) agreed with discouraging the use of the substance. The attitude to whether the use should be discouraged is significant with use or non-use status ($p = 0.000$). This is indicative of the fact that the users would not accept any action that may disallow the use of the substance especially on campus at least easily.

Table 4: Age distribution of users of Marijuana among residents of Fajuyi, Awolowo and Angola Halls in the university

Age range of users	Frequency	%
16-19	7	8.7
20-24	62	76.5
25-30	12	14.8
Total	81	100.0

Table 5: Attitude of respondents to Marijuana use

	Users		Non-Users		Total	
Attitude of respondents	Freq.	%	Freq.	%	Freq.	%
Use is acceptable	72	88.9	12	3.8	84	21.0
Not acceptable	0	0.0	231	72.4	231	57.8
Indifference about use	9	11.1	76	23.8	85	21.3
Total	81	100.0	319	100.0	400	100.0

Table 6: Reasons for not using Marijuana among non-users

Reasons	Frequency	%
Personal Decision not to use	175	55.4
Because of its health implications	106	32.7
On Religious grounds	23	6.9
No response	15	5.0
Total	319	100.0

This is because all the users had one cogent reason or the other for using the substance and any intervention program may have to take cognizance of this fact.

When the users of the substance were asked to give the most important reason why they came to use the substance, 45 (55.6%) of the 81 users claimed it was purely out of curiosity, 24 (29.6%) claimed they were lured into using it due to pressures from their friends and peers while only 12 (14.8%) users decided to use it out of the desire to have some pleasures. Whereas non-users would not use the substance mainly because of (Table 6) personal decision not to use (55.4%) and the likelihood of its having adverse effects on their health (32.7%).

Young people being adventurous have the tendency to out of curiosity experiment with a lot of things. Educational programmes would need to focus on youth friendly programmes including activities that could help young people develop positive values and attitudes and be more curious to propagate such ideals and values instead of propagating such deviant behaviors.

CONCLUSION

Marijuana is still in use within the university though the extent of its use among male students in the university may be small, its social consequences could be enormous. A prevalence of 20.3% as against 33% in an earlier study was observed. The age group 20-24 constitute the focal age group of this practice who judging by the average number of wraps consumed daily gives a ray of hope that they may not have become ardent users and could be amenable to change. The practice predominate in Awolowo hall of the university which incidentally is the center of most student social activities. While all the users would not want its use to be discouraged, majority of the non-users would not accept

its use and would want it discouraged. Monthly total income status of the students was observed to be directly related to their use or non-use status.

Various reasons were adduced by the users for the continued use of the drug. These reasons include, deriving of pleasure from its use as well as out of curiosity, among others. Personal decision not to use and the possibility of damaging health predominates among the non-users thus establishing the fact that linking positive behavioral practices with health protection and prevention would help the young ones in coping effectively with social pressures. In the light of this, youth centered programmes aimed at developing the capacity of young ones to cope with such temptation would be rewarding.

REFERENCES

Abbey, A., 1991. Acquaintance rape and alcohol consumption on college campuses: How are they linked? J. Am. College Health, 39: 165-169.

Affinnih, Y.H., 1999. A preliminary study of drug abuse and its Mental Health consequences among addicts in Greater Accra Ghana. J. Psychoactive Drugs, 31: 395-403.

Anthony, J.C. and K.R. Petronis, 1995. Early on-set drug use and risk of later drug problems. Drug and Alcohol Dependence, 40: 9-15.

Ariel, L.S., L.L. Lisa, L. Ning and W.R. Wilson, 2004. Episodic heavy drinking and marijuana use among College Students. Public Health and the Environment. APHA Washington DC, Nov., 6-10, 2004.

Bachman, J.G., L.D. Johnston and M.P. O'Malley, 2003. Monitoring the Future: A Continuing Study of American Youth (8th, 10th and 12th-Grade Surveys), 1976-2003 [Computer files]. Conducted by University of Michigan, Survey Research Center.

Bell, R., H. Wechsler and L.D. Johnston, 1997. Correlates of college student marijuana use: Results of a US national survey. Addiction, 92: 571-581.

Cannabinews, 2000. College Marijuana Use a growing problem. Boston Globe. www.drugsense.org. (October 2000).

Cesar, 2004. Nine signs of early marijuana use among Maryland Public Schools Students. Research Report. Center for Substance Abuse Research-University of Maryland, College Park, 13: 26.

Chait, L.D. and J. Pierri, 1992. Effects of Smokes of marijuana on human performance. A critical review. Marijuana/cannabinoids. Neurobio. Neurophysiol., 21: 387-424.

Fleigiel, S.E.G. and M. Roth *et al*., 1997. Traceobronical Histopathology in Habitual smokers of cocaine, marijuana and/or tobacco. Chest, 112: 319-326.

Fuller, E.T., A.E. Bowler, G.H. Yaylor and I.I. Gottensner, 1994. Schizophrenia and Manic Depressive disorders. New York Basic books.

Gfroer, J.C. and J.F. Epstein, 1999. Marijuana initiates and their impact on future drug abuse treatment need. Drug and Alcohol Dependence, 54: 229-237.

Grant, B.F. and D.A. Dawson, 1998. Age of onset of drug use and its association with DSM-IV drug abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. J. Substance Abuse, 10: 163-173.

Klein, T.W., S.C. Specter and H. Friedmann, 1998. Marijuana Immunity and Infection. J. Neuro-Immunol., 83: 102-115.

Morakinyo, V.O., 1983. Aversion therapy of cannabis dependence in Nigeria. Drug and Alcohol, Dependence, 12: 287-293.

NHSDA., Report: Marijuana use among youths. SAMHSA, 2002. Based on data from the National Household Survey on Drug Abuse, 2000.

NIDA., 1998. Marijuana: Facts for Teens. National Institute on Drug Abuse,. www.nida.nih.gov.

Olatawura, M., 1981. Pattern of self-reported drug use among secondary school students in Bendel State Nigeria. United Nations Office on Drug, United Nations.

Presley, C.A., P.W. Meilman, J.R. Cashin and R. Lyerla, 1996. Alcohol and Drugs on American College Campuses: Use, Consequences and Perceptions of the Campus Environment. Vol. III, 1991-1993 (Carbondale, IL: Core Institute).

Rudgley, R., 1998. The Encyclopedia of Psychoactive Substances. Little, Brown and Co., New York.

Tashkin, D.P. and B. Clark, 1997. Respiratory symptoms and lung function in habitual, heavy smokers of marijuana alone, smokers of marijuana and tobacco, smokers of tobacco alone and non-smokers. Am. Rev. Respir. Dis., 135: 209-216.

Thornicroft, G., 1990. Cannabis and Psychosis: Is there epidemiological evidence for an association?. Br. J. Psychiatry, 157: 25-33.

Van Teijlingen, E., 1997. Correlates of Alcohol and Marijuana use among Scottish post secondary helping-professionals students. J. Studies on Alcohol, 7: 86-91.

Verma, S.K., S. Muthily, C. Sion-Ann and E.K. Kua, 2002. Substance abuse in Schizophrenia: A singapore perspective. Soc. Psychiatry Epidemiol., 37: 326-328.

Wenger, T. and D. Croix *et al*., 1992. Effects of delta 9-tetra-hydro-cannabinol on pregnancy, puberty and the neuroendocrine system. Marijuana/cannabinoids. Neurobiol. Neurophysiol., 21: 387-424.

Wu, T.C. and D.P. Tashkin *et al*., 1988. Pulmonary hazards of smoking marijuana as compared with tobacco. New England J. Med., 318: 347-351.