Research Article

The Use and Prevalence of Cannabis among Students of Nnamdi Azikiwe University, Awka, Anambra State

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Abstract

Cannabis poses a growing public health challenge in Nigeria, affecting various groups, including students. Evidence shows a significant prevalence of Cannabis use among students nationwide, yet limited research has focused on university students, particularly in the Southeast region. This study aimed to assess the extent of Cannabis use and its impact on students at Nnamdi Azikiwe University, Awka, Anambra State. Data were collected using a structured, self-administered questionnaire randomly distributed to select undergraduate students from the Faculties of Arts, Engineering, Pharmaceutical Sciences, and Health Sciences. Data analysis was performed using the Statistical Package for Social Sciences (SPSS), version 27. Out of 377 participants, 113 (30%) reported using Cannabis. Female students accounted for 35.5% of the respondents, while males made up 65.5%. "Weed" emerged as the most prevalent form/identifier of Cannabis prevalent amongst students. The study identified the frequency and patterns of its use, with a majority (41.8% of the Cannabis users) reporting to use it occasionally. It went ahead to establish the various motivations for Cannabis use, including peer influence, confidence building, emotional issues, and recreational purposes, as well as the influence of the media on its prevalence. The media influenced 15.9% of users, while the leading motivation for Cannabis use was peer pressure (33.33%), and followed by emotional challenges (27.27%). Negative mental health effects were reported by 18.3% of users, while 25.8% experienced disrupted Sleep patterns as a result of Cannabis use. Additionally, 58.7% observed a significantly increased appetite as a result of the use of Cannabis. Consequently, engineering students exhibited the highest prevalence of Cannabis use (86.2%) compared to other faculties, and female students (68.5%) were found to be more significantly represented among Cannabis users than their male counterparts (50.2%). These findings underscore the need for targeted interventions and faculty-specific strategies to address Cannabis use, while also paying attention to gender-specific factors contributing to its prevalence.

Introduction

Cannabis refers to a group of three plants with psychoactive properties, known as Cannabis sativa, Cannabis indica, and Cannabis ruderalis. When the flowers of these plants are harvested and dried, you're left with one of the most common drugs in the world. Some call it weed, some call it pot, and others call it marijuana. It is usually consumed for its relaxing and calming effects. It is the most widely used (illicit) substance across the world, and its consumption is expected to increase, as various countries legalize the recreational use of marijuana. It is usually consumed for its relaxing and calming effects. It is the most widely used (illicit) substance across the world, and the consumption is expected to increase, as various countries legalise the recreational use of marijuana. In some U.S. states, it's also prescribed to help with a range of medical conditions, including chronic pain, glaucoma, and poor appetite. But while cannabis comes from a plant and is considered natural, it has strong effects, both positive and negative.

Cannabis use among adolescents, including university students, has been consistently reported to be associated with a high incidence of suicidal behaviours. Little empirical research has been conducted on the propensity impact of cannabis use on suicidal behaviours in Africa.

Possible mechanisms underlying an association between early cannabis use and educational attainment include the

possibility that cannabis use induces amotivational syndrome or that cannabis use causes cognitive impairment. However, there appears to be relatively little empirical support for these hypotheses. It is proposed that the link between early cannabis use and educational attainment arises because of the social context within which cannabis is used. In particular, early cannabis use appears to be associated with the adoption of an anti-conventional lifestyle characterized by affiliations with delinquent and substance-using peers, and the precocious adoption of adult roles, including early school leaving, leaving the parental home, and early parenthood [1].

Methods

Study area and setting

The study was conducted in Nnamdi Azikiwe University, Awka, Anambra State. The Nnamdi Azikiwe University has a total of seventeen faculties. For this study, four faculties were used for the assessment. The faculties were: the Faculty of Engineering, the Faculty of Arts, the Faculty of Pharmaceutical Sciences, and the Faculty of Health Sciences.

Study design

This study utilized a descriptive cross-sectional study design. This study was conducted among students at Nnamdi Azikiwe University, Awka, Anambra State, Nigeria, in four out of the university's seventeen faculties: Arts, Engineering, Pharmaceutical Sciences, and Health Sciences.

The questionnaire for this research was adapted and pre-tested before it was distributed to second-year to fifth-year students of the four Faculties. These questionnaires were self-administered and collected back after the respondents finished filling them.

Study population

The study was carried out among the Students in the Faculty of Pharmaceutical Sciences, Health Sciences, Engineering, and Arts Faculty of the Nnamdi Azikiwe University, Awka. In the Faculty of Health Sciences, four departments were used as a case study for the faculty. The departments were: Environmental Health Sciences, Medical Rehabilitation, Radiography, and Medical Laboratory Sciences.

Sample size

The study was carried out among undergraduate students of Nnamdi Azikiwe University in Anambra State. The sample size was derived using Yamane's formula [n = N/1+N (e)2], at an estimated attrition rate of 5%. The sample size obtained for the study was three hundred and seventy-seven (377) students.

Sampling techniques

The study employed a convenience sampling technique to distribute the validated questionnaire to the eligible Students.

The consent to participate in the research was obtained from each of the student participants before the questionnaire was administered to them.

Study duration

The Cross-sectional study was conducted for four months, from August to November 2024.

Ethical consideration

Before the study commenced, ethical approval for the study protocol was obtained from the Research and Ethics Committee of Chukwuemeka Odumegwu Ojukwu University Teaching Hospital (COOUTH), with Reference: COOUTH/HREC/Vol.11/405 of 5/12/2024. Informed consent was obtained from the participants before they participated in the research.

Respondent confidentiality was maintained at all times to avoid bias.

Research tool

The research tool used was a semi-structured questionnaire, which was developed and validated before being used to obtain data.

Data analysis

Upon retrieval, the questionnaires were meticulously organized and scrutinized to ensure their overall quality and precision before the data analysis process. Data analysis was conducted employing Version 27.0 of the Statistical Package for Social Sciences (SPSS). The initial step was the generation of frequency distributions to elucidate the socio-demographic characteristics of the respondents. Subsequently, a Chi-square analysis was executed to assess potential associations between variables, with statistical significance denoted by a p - value of less than 0.05.

Results

Demographic results (Table 1)

Table 1: Showing Socio-demographic Characteristics Of Student Participants.

Variable		Frequency (N = 377)	Percentage
Age (In years)	Under 18	15	4.0
	18 - 25	358	95.0
	26 - 35	4	1.1
	36 & above	0	0.0
	Mean	21.1 SD = 2.63	
Gender:	Male	247	65.5
	Female	130	34.5
Year of Study	200	53	14.1
	300	85	22.5
	400	128	34
	500	111	29.4
Faculty	Engineering	145	38.5
	Pharmaceutical Sciences	42	11.1
	Arts	89	23.6
	Health Sciences	101	26.8
SD = Standard Deviation			

Awareness and use of cannabisfrequency and patterns of cannabis use amongst students (Table 2)

Frequency and patterns of cannabis use amongst students (Table 3)

Motivation, influence, and drivers for cannabis use (Table 4)

Correlation between use of cannabis and demographics (Table 5)

Discussion

The study examined cannabis use among university students, focusing on demographic factors, usage patterns, and motivations. The majority of participants (95%) were aged between 18 - 25 years, with a mean age of 21.1 years, aligning with similar studies on university students, according to [2], who reported a mean age of 20.8 years among students in Ghana. A small proportion (4%) were under 18, likely due to early admission, while 1.1% were above 25, possibly due to delayed education.

Gender distribution showed a higher proportion of males (65.5%) than females (34.5%), consistent with enrolment trends in Nigeria. This pattern aligns with work done by [3] who found a similar male-to-female ratio of 63:37 in Nigerian universities. In contrast, Western studies, such as [4], reported higher female enrolment.

Regarding academic years, the highest concentrations

Table 2: Showing Participants' Awareness and Usage of Cannabis.

Variable		Frequency (N = 377)	Percentage
Are you familiar with the term "Cannabis" like Marijuana, Weed, Igbo, Kush, Grass, Joint, and Pot?	Yes	377	100.0
	No	0	0.0
Have you ever used Cannabis? (Marijuana, Weed, Igbo, Kush, Grass, Joint, and Pot)	Yes	113	30
	No	264	70
If yes, please specify the ones you have used?	(N = 113)		
	Igbo	19	16.4
	Colos	11	9.4
	Cannabis	10	8.5
	Ice	4	3.8
	Kush	16	14.1
	Weed	36	31.9
	AZ	8	7.0
	Loud	20	17.8

Table 3: Showing Participants Frequency and Patterns Of Cannabis Use.

Variable		Frequency (N = 113)	Percentage
How frequently have you used Cannabis in the past year?	Rarely	17	15.5
	Occasionally	47	41.8
	Regularly	28	24.4
	Never used	21	18.3
If you have used Cannabis, please describe the patterns of your usage (e.g., always, weekends, special occasions):	Weekends	19	16.9
	Special Occasions	48	42.3
	Always	10	8.9
	Bimonthly	4	3.3
	Once in awhile	32	28.6

Table 4: Showing the Motivation, Influence, and Drivers For Cannabis Use.

Variable		Frequency (N = 113)	Percentage
Please select the primary motivations that influenced your decision to use Cannabis:	Confidence building	11	9.9
	Emotional issues	43	38.0
	Peer influence	19	17.0
	To enhance reading and understanding	5	4.2
	Recreational purposes	20	17.8
	Curiosity	1	0.9
	None	14	12.2
To what extent do you feel influenced by the social environment (friends, peers, social events) to use cannabis?	Not influenced at all (N=377)	159	42.2
	Slightly influenced	111	29.4
	Moderately influenced	75	19.9
	Very influenced	2	0.5
	Extremely influenced	30	8.0
Have you noticed any changes in your participation in social activities due to Cannabis use?	Increased social engagement	6	2.8
	No Impact	114	53.5
	Reduced social participation	89	41.8
	Withdrawal from social activities	4	1.9
To what extent do you believe media portrayals or representations of substance use influence student attitudes toward Cannabis?	Not influential at all	42	11.1
	Slightly influential	103	27.3
	Moderately influential	97	25.7
	Very influential	87	23.1
	Extremely influential	48	12.7

Table 5: Showing Relationship between Social Demographic Factors & Usage Of Cannabis.

Variable		Cannabis Usage (%)				
		Yes	No	Total	X²	p - value
Age	Under 18	4 (27)	11 (73)	15	11.142	0.004*
	18-25	209 (58.3)	149 (41.7)	358		
	26-35	0 (0.0)	4 (100)	4		
	Above 35	-	-	-		
	Total	213	164	377		
Gender	Female	89 (68.5)	41 (31.5)	130	11.554	0.001*
	Male	124 (50.2)	123 (49.8)	247		
	Total	213	164	377		
Year of Study	200	22 (42)	31 (58)	53	6.470	0.091
	300	50 (59)	35 (41)	85		
	400	79 (61.7)	49 (38.3)	128		
	500	62 (55.9)	49 (44.1)	111		
	Total	213	164	377		
Faculty	Engineering	125 (86.2)	20 (13.8)	145	95.429	0.000*
	Arts	38 (42.7)	51 (57.3)	89		
	Pharmaceutical Sciences	23 (54.8)	19 (45.2)	42		
	Health Sciences	27 (26.7)	74 (73.3)	101		
	Total	213	164	377		

were in the 400-level (34%) and 500-level (29.4%), suggesting that retention rates increase as students' progress. Faculty representation showed Engineering (38.5%) had the highest enrolment, followed by Health Sciences (26.8%), Arts (23.6%), and Pharmaceutical Sciences (11.1%). Engineering's dominance is consistent with [5], who found similar enrolment patterns in Nigeria. The lower representation of Pharmaceutical Sciences students may be due to stringent admission criteria.

Cannabis awareness was universal (100%), while 56.2%

reported usage higher than the global average of 13.5% [6]. This aligns with studies by [7], who reported a 52% prevalence in South-South Nigeria, and [8], who found a 45% prevalence in Lagos. The higher prevalence in this study may be due to peer pressure, accessibility, and cultural normalization [9].

The most common cannabis variants were weed (31.9%), followed by Loud (17.8%), Igbo (16.4%), and Kush (14.1%), reflecting trends noted by [10].

Among cannabis users, 41.8% reported occasional use, 24.4% used regularly, and 15.5% rarely used. The majority (42.3%) consumed cannabis during special occasions, aligning with [11,12], who found that cannabis is often used socially or during celebrations.

Regarding social impacts, 56.3% reported no adverse effects on relationships, while 11.7% acknowledged issues like reduced communication and loss of friendships. This aligns with [12], who found that habitual use could strain relationships. Conversely, 4% reported increased self-confidence, suggesting cannabis as a coping mechanism for anxiety.

Social participation varied, with 53.5% reporting no effect, consistent with [5], where over half of users noted a neutral impact. However, 41.8% experienced reduced engagement, possibly due to stigma or psychoactive effects like paranoia. [13] similarly found that regular users often withdrew from group activities. A small subset (2.8%) experienced increased sociability, aligning with [9], who suggested that cannabis temporarily boosts social interaction.

Stigma was reported by 20.2% of users, similar to [8], who found a 22% stigma rate among Nigerian undergraduates. However, 79.8% of participants reported no stigma, indicating growing acceptance, particularly in urban settings [7].

The most common motivator for cannabis use was emotional distress (38.0%), with students using cannabis to cope with stress and depression, as noted by [7]. Peer influence (17.0%) and recreational use (17.8%) were also significant drivers. Notably, curiosity played a minor role in this study, differing from [9], where curiosity was a key factor among younger users.

Social influence varied, with 42.2% reporting no external pressure, while 29.4% felt slightly influenced and 19.9% moderately influenced by peers. Only 8.5% described strong peer influence, contrasting with [5], who found peer pressure more significant in some student groups.

Media influence was notable, with 35.8% acknowledging its role in shaping attitudes toward cannabis, supporting findings by [12,14], who noted the glamorization of drug use in media.

Health effects were minimal, with 100% of users reporting no major physical or mental health concerns, contradicting studies linking cannabis use to mental disorders [15]. While 84% reported no physical effects, 9.4% experienced fatigue or respiratory issues, and 18.3% reported mental health effects like stress and paranoia. Increased appetite (58.7%) and disrupted sleep (25.8%) were common, consistent with the work done by [13].

The primary sources of cannabis information were peer groups (44.8%) and social media (41.4%), with academic sources contributing only 13.3%, indicating a gap in formal education [10].

Cannabis use was highest among the 18 - 25 age group (58.3%), aligning with global trends [9]. The 26–35 age group showed no reported usage, suggesting a decline as individuals mature, consistent with [13].

Gender differences were significant, with higher cannabis use among females (68.5%) than males (50.2%), divergent from traditional studies, where males typically use more cannabis. This shift aligns with [16], who observed narrowing gender disparities in urban Nigerian settings. Changing societal norms and peer influence may contribute to this trend [13].

The study found no significant relationship between year of study and cannabis use, contrasting with [5], who reported higher use among final-year students. This discrepancy may be due to sample differences or contextual factors, such as social and academic pressures.

These findings suggest the need for targeted public health interventions, such as gender-specific campaigns and faculty-based educational programs on the risks of cannabis use among undergraduate students. Compared to other Nigerian studies, this study found a higher prevalence of cannabis use among females and engineering students, which calls for tailored prevention strategies in those groups. Further research with a larger sample size is needed to better understand these patterns.

Conclusion

This study provides valuable insights into the use, trends, and prevalence of Cannabis use among students of Nnamdi Azikiwe University. The findings reveal an alarming prevalence of Cannabis use, driven primarily by the media blitz on cannabis use, peer pressure, building confidence, and emotional struggles. The study also revealed higher cannabis use among females than males, which is a direct effect of narrowing gender disparity in society.

The consequences of Cannabis use, which span academic, social, and health domains, emphasize the urgent need for targeted interventions. These include awareness campaigns, peer education initiatives, and improved access to mental health services to address the root causes of substance abuse.

Suffice it to say that enforcing stricter policies and measures to limit the availability of Cannabis on campus is vital. Overall, a holistic approach, focusing on prevention, intervention, and support systems, is essential for creating a safer and healthier university environment.

Supplementary Materials

References

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