

ORIGINAL ARTICLE

Determinants Of Knowledge, Attitude and Self-efficacy of Khat Chewing Among School Students in Mogadishu Somalia

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ABSTRACT

Introduction: Khat chewing has been a common habit throughout the Horn of Africa and the Arabian Peninsula for thousands of years. It is estimated that more than 20 million people in Africa and the Arabian Peninsula are adolescents. This study aimed to assess the knowledge, attitude, and self-efficacy of khat chewing among adolescents in Mogadishu, Somalia. **Method:** A cross-sectional study with a sample of 284 adolescents was used. A self-administered pretested questionnaire was used after obtaining an ethical approval from Universiti Putr Malaysia. Data were coded, entered, and statistically analyzed. **Results:** The prevalence of khat chewing among respondents was 10.2%. Almost more than half of the participants had poor knowledge (184, 64.8%) and self-efficacy (154, 54.2%), while 140 (49.3%) respondents had positive attitudes. Significant predictors of the students' knowledge of khat chewing included monthly income of more than 500\$ (AOR: 2.145), family history such as cousin (AOR=0.347), fathers with a high school (AOR=1.75) and a college degree (AOR=2.21). Significant predictors of the students' attitude towards khat chewing included family income of 100-299 USD (AOR=0.5), fathers' with a high school (AOR=2.5) and college (AOR=2.4). Significant predictors of the students' self-efficacy to resist khat chewing included family income of 100- 300\$ (AOR=2.25), fathers with a high school (AOR=2.6), and khat accessibility that is fairly difficult (AOR=0.63) and fairly easy (AOR=0.55). **Conclusion:** The study highlights the need for increased awareness and education about the adverse effects of khat chewing and the importance of addressing social norms and peer pressure in shaping adolescent attitudes toward Khat.

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INTRODUCTION

Khat is a stimulant drug derived from the leaves of the *Catha edulis* plant, chewed daily by more than 20 million people in the Arabian Peninsula and East Africa (1). This habit is deeply rooted in the socio-cultural traditional countries (2). Due to its increasing prevalence and complications, it is considered a public health concern, particularly among adolescents (3). The harmful effects of khat chewing include myocardial infarction, ischemic heart disease, manic-like schizophrenia, erectile dysfunction, psychotic experiences, oesophageal cancer, stroke, gastritis, hepatitis (1), perceived psychological problems (4–6), manic (7,8), schizophrenia, and psychosis (9). Unfortunately, many khat chewers are unaware of its harmful effect, which may deteriorate their health (10). Despite its widespread usage, there

is limited research on the knowledge, attitude and self-efficacy of khat chewing among adolescents, particularly in Somalia, where khat consumption is prevalent.

Understanding these factors is essential as they can influence the initiation and continued consumption of khat among adolescents and have implications for their health and well-being. Various factors contribute to practicing khat chewing, including poor knowledge (11), attitude (11, 12) and self-efficacy (13) of the harmful effects of chewing khat not only on the chewers' health but also on the whole society. In addition, other factors, such as cultural or peer norms (14) and accessibility (15), were scientifically proven to influence khat chewing behavior, particularly among adolescents.

Given the paucity of research in this area, there is a need to understand better the knowledge, attitude, and self-efficacy of khat chewing among adolescents in regions where khat consumption is prevalent. This information is crucial for developing evidence-based interventions to reduce the prevalence of khat chewing

among adolescents and mitigate its adverse effects. Therefore, this study seeks to fill this gap by assessing the knowledge, attitude, and self-efficacy of khat chewing among adolescents in Somalia.

MATERIALS AND METHODS

This is designed as a cross-sectional study, which was conducted on 284 adolescent students aged between 12 and 24 years residing in Mogadishu, the capital and most populated city of Somalia, located just north of the Equator of the Indian Ocean, the coastal Banadir region on the Indian Ocean (16). All students who consented to participate in the study were included.

The study sample size was calculated using the two proportions sample problems. We set the desired level of statistical power at 80% and the significance level at 0.05. Our sample size calculation indicated a minimum of 125 participants. To account for potential attrition or missing data, we increased our sample size by 20%, resulting in a target sample size of 156 participants. Based on the calculation above, each group needed a minimum sample size of 156, indicating that 284 respondents were required for the entire sample in both groups.

For sample size determination in health studies (17), the study used a multistage cluster random sampling technique as a probability proportionate-to-size method. The first stage involved a purposive selection of the most populous districts ($n=4$) in Mogadishu. Next, 20 villages were selected purposively in all four districts through the village leader or representative since the data were collected during the pandemic and enforcement of movement control order (MCO). Only 10 villages agreed to participate in this study. The second stage involved selecting secondary schools in these villages from private and public schools to get a good mixture of students. There were 30 secondary schools (26 private and four public schools), and of them, only ten schools consented to the study (eight private and two public schools).

The questionnaire was pretested and self-administered in English. In all the selected schools, the questionnaires were administered in a classroom setting. The questionnaire consists of six sections, including sociodemographic factors, khat-related factors, peer norms, knowledge, attitude, and self-efficacy. Knowledge related to khat was assessed using 22 items adapted from Nakajima (12), which were responded to by answering one of the following three options: "I agree", "I do not agree", or "I do not know". Attitude related to khat was assessed using 11 items adapted from Khatib et al. (18), which were responded to using the 5-point Likert scale starting from "strongly disagree" (scored as 1) to "strongly agree" (scored as 5). Self-efficacy (confidence) to resist khat chewing was assessed using 7 items which were

responded to using a 4-point scale starting from "not sure at all" (scored as 1) to "definitely sure" (scored as 4).

After screening the collected data, they were entered, coded, and analyzed using IBM- SPSS version 27. Normality was checked so as to use parametric tests for normally distributed data and non-parametric tests for non-normal distributed data. Frequency and percentages were used for categorical data. Chi-square test was used to determine if there was a significant association between dependent and independent variables. The significance level was set at $p < 0.05$.

The study was ethically approved by the JKEUPM Ethical Review Board (Ref: JKEUPM-2019-275) and the Ministry of Education Somalia (Ref: WWHTS/XAG/0419/2019). All the participants were informed of the study's purpose and required voluntary written consent before participating. Moreover, they were informed that their data will be maintained strictly confidential and will be used only for research purposes.

RESULTS

The mean age of the respondents was 16.58 ± 1.87 years, ranging between 12–22 years. Most respondents were male (59.2%), aged ≥ 18 years (70.4%). Most respondents' fathers were employed (70.8%) and completed high school (38.4%). Almost a third of the respondents' parents earned less than USD 100, and the educational status of more than half of the respondents' mothers was less than high school (57.0%). The prevalence rate of khat chewing was 10.2% (Table I). Table I shows the association of knowledge, attitude, and self-efficacy of khat chewing with study variables. There was a significant association between gender and knowledge of khat chewing ($\chi^2 = 3.890$, $p = 0.032$), indicating that females are more likely to have poor knowledge. In addition, there was a significant association between accessibility and attitude towards khat chewing ($\chi^2 = 10.273$, $p = 0.036$).

The assessment of respondents' knowledge towards khat chewing is shown in Table II. Most respondents agreed that khat chewing improves physical fitness (87.7%), followed by those agreed that it causes haemorrhoids (35.6%) and low blood sugar (31%). However, most respondents disagreed that khat chewing is considered a drug (96.8%), followed by those who disagreed that it causes oral health problems (96.8%), many family problems (95.4%) and aggression between spouses (95.1%).

Table III shows The assessment of respondents' attitudes towards khat chewing is shown in Figure 1. Most respondents approved of khat chewing (72.9%), followed by those who agreed that khat chewing helps maintain Somali cultural identity (61.2%), those who agreed that the rightness for women to chew khat

Table 1: Association between factors and knowledge, attitude, and self-efficacy of khat chewing

Factors	Total n (%)	Knowledge				Attitude				Self-Efficacy			
		Poor	Good	χ^2	P value	Negative	Positive	χ^2	P value	Poor	Good	χ^2	P value
Age (years)				0.629	0.254			0.443	0.296			0.026	0.487
<18 years	84(29.6%)	50(59.5%)	34(40.5%)			41(48.8%)	43(51.2%)			47(56.0%)	37(44.0%)		
≥18 years	200(70.4%)	129(64.5%)	71(35.5%)			89(44.5%)	111(55.5%)			114(57.0%)	86(43.0%)		
Gender				3.890	0.032*			0.894	0.205			0.839	0.213
Male	168 (59.2%)	98(58.3%)	70(41.7%)			73(43.5%)	95(56.5%)			99(58.9%)	69(41.1%)		
Female	116 (40.8%)	81(69.8%)	35(30.2%)			57(49.1%)	59(50.9%)			62(53.4%)	54(46.6%)		
Fathers' employment status				0.034	0.482			0.070	0.447				
Employed	201(70.7%)	126(62.7%)	75(37.3%)			91(45.3%)	110(54.7%)			115(57.2%)	86(42.8%)	0.077	0.441
Unemployed	83(29.3%)	53(63.9%)	30(36.1%)			39(47.0%)	44(53.0%)			46(55.4%)	37(44.6%)		
Monthly income (USD)				3.943	0.268			5.322	0.150			6.623	0.085
<100 USD	88(30.9%)	58(65.9%)	30(34.1%)			35(39.8%)	53(60.2%)			47(53.4%)	41(46.6%)		
100 – 299USD	82(28.8%)	50(61.0%)	32(39.0%)			46(56.1%)	36(43.9%)			48(58.5%)	34(41.5%)		
300 – 499USD	63(22.3%)	44(69.8%)	19(30.2%)			26(41.3%)	37(58.7%)			30(47.6%)	33(52.4%)		
>500 USD	51(18.0%)	27(52.9%)	24(47.1%)			23(45.1%)	28(54.9%)			36(70.6%)	15(29.4%)		
Father's educational status				3.710	0.447			4.006	0.405			7.909	0.095
Less than high school	99(34.9%)	69(69.7%)	30(30.3%)			51(51.5%)	48(48.5%)			64(64.6%)	35(35.4%)		
Completed high school	109(38.4%)	63(57.8%)	46(42.2%)			46(42.2%)	63(57.8%)			51(46.8%)	58(53.2%)		
Collage degree	76(26.8%)	27(58.7%)	19(41.3%)			17(37.0%)	29(63.0%)			28(60.9%)	18(39.1%)		
Master's degree	15(5.3%)	10(66.7%)	5(33.3%)			8(53.3%)	7(46.7%)			10(66.7%)	5(33.3%)		
Doctoral Philosophy	15(5.3%)	10(66.7%)	5(33.3%)			8(53.3%)	7(46.7%)			8(53.3%)	7(46.7%)		
Mother's educational status				2.567	0.277			2.201	0.333				
Less than high school	162(57.0%)	111(60.3%)	51(51.0%)			85(60.3%)	77(53.8%)			87(54.0%)	75(61.0%)		
Completed high school	84(29.6%)	49(26.6%)	35(35.0%)			36(25.5%)	48(33.6%)			48(29.8%)	36(29.3%)		
Tertiary level	38(13.4%)	24(13.0%)	14(14.0%)			20(14.2%)	18(12.6%)			26(16.1%)	12(9.8%)		
Khat status				2.787	0.426			2.173	0.537			2.599	0.458
Ever	10(3.5%)	7(70.0%)	3(30.0%)			3(30.0%)	7(70.0%)			7(70.0%)	3(30.0%)		
Current	10(3.5%)	8(80.0%)	2(20.0%)			6(60.0%)	4(40.0%)			6(60.0%)	4(40.0%)		
Intermittent	9(3.2%)	4(44.4%)	5(55.6%)			5(55.6%)	4(44.4%)			7(77.8%)	2(22.2%)		
Never	255(89.8%)	160(62.7%)	95(37.3%)			116(45.5%)	139(54.5%)			141(55.3%)	114(44.7%)		
Family History of Khat				2.753	0.600			2.238	0.692			0.688	0.953
Father	46(16.2%)	25(54.3%)	21(45.7%)			19(41.3%)	27(58.7%)			27(58.7%)	19(41.3%)		
Brother	24(8.5%)	16(66.7%)	8(33.3%)			14(58.3%)	10(41.7%)			12(50.0%)	12(50.0%)		
Cousin	35(12.3%)	25(71.4%)	10(28.6%)			15(42.9%)	20(57.1%)			19(54.3%)	16(45.7%)		
Mother	15(5.3%)	9(60.0%)	6(40.0%)			6(40.0%)	9(60.0%)			9(60.0%)	6(40.0%)		
Relative	164(57.7%)	104(63.4%)	60(36.6%)			76(46.3%)	88(53.7%)			94(57.3%)	70(42.7%)		
Accessibility				3.519	0.475			10.273	0.036*			8.342	0.080
Properly impossible	12(4.2%)	8(66.7%)	4(33.3%)			7(58.3%)	5(41.7%)			9(75.0%)	3(25.0%)		
Very difficult	7(2.5%)	6(85.7%)	1(14.3%)			6(85.7%)	1(14.3%)			4(57.1%)	3(42.9%)		
Fairly difficult	31(10.9%)	20(64.5%)	11(35.5%)			11(35.5%)	20(64.5%)			21(67.7%)	10(32.3%)		
Fairly easy	78(27.5%)	45(57.7%)	33(42.3%)			32(41.0%)	46(59.0%)			50(64.1%)	28(35.9%)		
Very easy	156(54.9%)	105(67.3%)	51(32.7%)			85(54.5%)	71(45.5%)			77(49.4%)	79(50.6%)		

(53.5%), then those who agreed that khat chewing does not cause problems for most people (52.5%).

On the contrary, most respondents disagreed that young people chew more khat than adults (71.1%), followed by those who disagreed that khat chewers do not look after their families properly (62%), then those who disagreed that khat chewing does not cause problems for most people (47.5%).

The assessment of respondents' self-efficacy to resist khat chewing is shown in Figure 1. Most respondents reported they are confident to refuse any offer of khat by their friends when no adults are around (41.9%), followed by those who reported their confidence towards refusing any offer of khat at their homes by a friend when no adults are around (37.7%), then those who reported their total ability to refuse any offer of khat by a friend at his/her home when no adults are there (34.1%).

However, most respondents reported they are unconfident to refuse any offer of khat by a friend at a party (70.8%), followed by those who reported their nonconfidence towards refusing any offer of khat by a parent or neighbor at home (69.3%), then those who reported their unsure towards refusing any offer of khat at their homes by a brother or cousin when no adults are home (67.3%).

The overall assessment of the respondents' levels of knowledge, attitude, and self-efficacy to resist khat chewing is shown in Figure 2. Most respondents had poor knowledge (64.8%), negative attitudes (49.6%), and poor self-efficacy (56.7%).

Table IV and V show the multivariate analysis, in the knowledge section, monthly income, fathers' education, and Family history were the predictors of knowledge. Those with income of >500\$ were 2.3 times higher in having good knowledge compared to those who earn

Table II: Assessment of respondents' knowledge of khat chewing (N=284).

Knowledge questionnaire	Correct answers		Incorrect answers	
	Frequency	Percentage %	Frequency	Percentage %
Khat depletes financial resources	16	5.6%	268	94.4%
Khat improves alertness	29	10.2%	255	89.8%
Khat causes loss of appetite	35	12.3%	249	87.7%
Khat reduces the need for sleep	42	14.8%	242	85.2%
Khat leads to malnutrition	24	8.5%	260	91.5%
Khat causes constipation	58	20.4%	226	79.6%
Khat causes laziness	42	14.8%	242	85.2%
Khat causes mood disorders	34	12.0%	250	88.0%
Khat causes oral health problems	9	3.2%	275	94.8%
Khat can cause back problems because of sitting for a long time	59	20.8%	225	79.2%
Khat causes nervous disorders	71	25.0%	213	75.0%
Khat causes financial damage to the entire family	15	5.3%	269	94.7%
Khat causes haemorrhoids	101	35.6%	183	64.4%
Khat causes many family problems	13	4.6%	271	95.4%
Khat improves physical fitness	249	87.7%	35	12.3%
Khat causes anxiety and tension	78	27.5%	206	72.5%
Khat causes social problems	24	8.5%	260	91.5%
Khat causes depression	74	26.1%	210	73.9%
Khat causes low blood sugar	88	31.0%	196	69.0%
Khat causes boredom	65	22.9%	219	77.1%
Khat is a drug	9	3.2%	275	96.8%
Khat causes aggression between spouses	14	4.9%	270	95.1%

Table III: Distribution of Attitudes Toward Chewing khat among Respondents

Attitude questionnaire	Strongly disagree	Disagree	No opinion	Agree	Strongly agree
I approve of khat chewing	22(7.7%)	7(2.5%)	48(16.9%)	205(72.2%)	2(0.7%)
It is all right for women to chew khat	25(8.8%)	13(4.6%)	70(24.6%)	176(62.0%)	0(0.0%)
Chewing khat helps maintain Somali cultural identity	32(11.3%)	21(7.4%)	63(22.2%)	166(58.5%)	2(0.7%)
Khat chewing does not cause problems for most people	2(0.7%)	133(46.8%)	91(32.0%)	30(10.6%)	28(9.9%)
It is alright for older people to chew khat, but not young people	35(12.3%)	36(12.7%)	81(28.5%)	130(45.8%)	2(0.7%)
It is alright for men to chew khat	29(10.2%)	32(11.3%)	110(38.7%)	112(39.4%)	1(0.4%)
Men who chew khat do not look after their families properly	104(36.6%)	72(25.4%)	56(19.7%)	52(18.3%)	0(0.0%)
Chewing khat is alright if it is done in moderation	35(12.3%)	23(8.1%)	116(40.8%)	110(38.7%)	0(0.0%)
Young people chew more khat than adults	96(33.8%)	106(37.3%)	34(12.0%)	48(16.9%)	0(0.0%)
I would rather my children chew khat than drink alcohol	36(12.7%)	39(13.7%)	65(22.9%)	144(50.7%)	0(0.0%)
I would rather chew khat than smoke cigarettes	46(16.2%)	26(9.2%)	64(22.5%)	148(52.1%)	0(0.0%)

less than 100\$. Similarly, those whose father's education had completed high school and college were 1.8 and 2.2 times higher in having good knowledge than those with a primary school, respectively. Regarding the attitude section, family income, fathers' education, and Khat

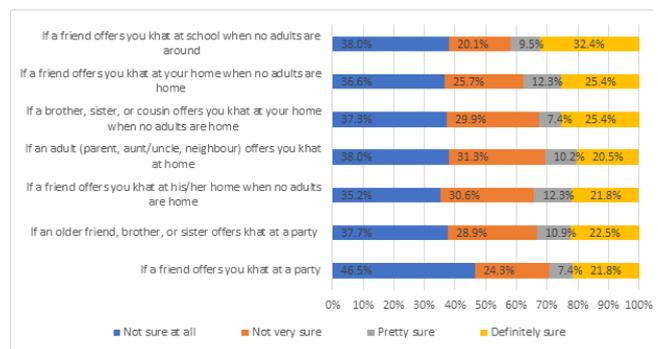


Figure 1: Distribution of Self-Efficacy Towards Khat Chewing

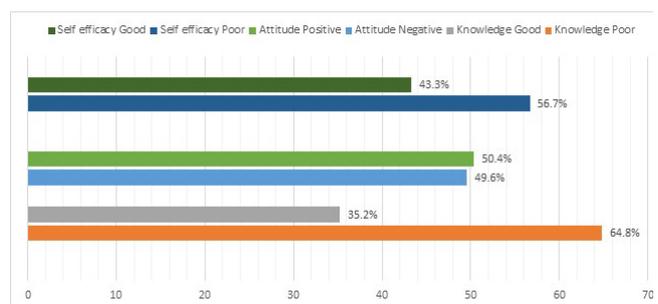


Figure 2: Level of knowledge, attitude, and self-efficacy of khat chewing among adolescents

chewing status were reported the predictors of attitude among adolescents. Those who earn 100-299 USD had a 50% less positive attitude than those who make <100 USD. On the other hand, those who completed high school and college had a 2.5 and 2.4 times higher positive attitude compared to those who did not finish secondary school. In addition, those who had currently chewing Khat had an 80% less positive attitude than those who reported Khat chewer ever. In Self-efficacy, family income, fathers' education, subjective norms, and accessibility were significant predictors of self-efficacy. Those with an income of 100-300\$ were 2.25 times higher in having good self-efficacy compared to those who earn less than 100\$. Similarly, those whose fathers had completed high school and college were 2.6 times higher in having good self-efficacy than those whose fathers had a primary school. For those who reported that their best friends and family accept them for been chewer were 54.3 higher comparing for those who were reported for been glad. Finally, those who reported that khat accessibility is fairly difficult and fairly easy were 63% and 55% less likely to have good self-efficacy than those who reported very easy, respectively.

DISCUSSION

This study showed that students had poor knowledge of khat chewing as well as poor self-efficacy to resist it, despite being aware of its potential adverse health consequences. However, their attitude towards this habit was still positive. Our study found that the prevalence of khat chewing was 10.2%, which is lower than that

Table IV: Predictors of knowledge attitude and self-efficacy of Khat chewing among adolescents.

Variable	Knowledge			Attitude			Self-efficacy		
	COR	AOR	P value	COR	AOR	P value	COR	AOR	P value
Age (years)									
<18 years	1.040			1					
≥18 years	1			1.338			1.018		
Gender									
Male	1.504*			1.609*			1		
Female	1			1			1.326		
Fathers' employment status									
Employed	1.311			1.050			1		
Unemployed	1			1			1.137		
Monthly income (USD)									
<100 USD	1			1	1		1.692	2.245*	0.009
100 – 299USD	1.449	1.714		0.492*	0.510*	0.001	1.350	1.337	
300 – 499USD	0.954	1.073		0.765	0.793		2.202*	2.097	
>500 USD	1.851	2.145*	0.001	0.534	0.553		1	1	
Father's educational status									
Less than high school	1	1		1	1		1	1	
Completed high school	1.706	1.758*	0.001	2.473*	2.455*	0.012	1.524	2.606*	0.001
Collage degree	1.915	2.208*	0.01	2.337*	2.357*	0.001	.593	1.363	
Master's degree	0.813	0.894		0.708	0.660		2.260	0.991	
Doctoral Philosophy	1.330	1.663		0.850	1.070		1.524	2.330	
Mother's educational status									
Less than high school	1			1			1		
Completed high school	1.706			2.473*		0.001	0.815		
Tertiary level	1.529			1.521			0.581		

reported by previous studies which showed that the prevalence of khat chewing among students was 20.5% (15), 21.5% (19), 24.2% (20), 23.9% (21), and 32.5% (22).

Our study revealed that most students agreed that khat chewing improves physical fitness, causes haemorrhoids, and lowers blood sugar. However, most students disagreed that khat chewing is considered a drug, followed by those reporting that khat chewing causes oral health problems, many family problems, and aggression between spouses. It also revealed that most students were unaware of the harmful effect of khat chewing. This result agrees with that reported by previous studies which showed that most students were unaware of the harmful effects of khat chewing (23, 24). The current study showed that most respondents disagreed that young people chew more khat than adults, khat chewers do not look after their families properly, and khat chewing does not cause problems for most people.

It also revealed that most respondents reported they are unconfident to refuse any offer of khat by a friend at a party, by a parent or neighbor at home, or by a brother or cousin at their homes when no adults are there. These findings comply with that reported by a previous study (13) which revealed that most students were unconfident to refuse any offer of khat.

Our study showed monthly income, fathers' education, and family history were significant predictors of the students' knowledge of khat chewing. In addition, family income, fathers' education, and khat chewing status were significant predictors of the students' attitude towards khat chewing. Finally, family income, fathers' education, and accessibility were significant predictors of the students' self-efficacy to resist khat chewing.

Our study has several limitations that must be considered. First, our sample was limited to a specific region and population, which may limit the generalizability of our findings to other populations. Additionally, our study relied on self-reported knowledge, attitude, and self-efficacy measures, which may be subjected to bias. Future studies are recommended to conduct a similar study using objective measures of knowledge, attitude, and self-efficacy with a large and diverse sample.

Despite these limitations, our study provides important insights into adolescent students' knowledge and attitude towards khat chewing as well as their self-efficacy to resist it. Based on our findings, we recommend healthcare providers to develop culturally sensitive approaches to educating individuals about the potential adverse health consequences of khat chewing. In addition, policymakers should consider developing targeted interventions to reduce khat chewing, particularly among young adults who may be more susceptible to peer pressure.

Table V: Predictors of knowledge attitude and self-efficacy of Khat chewing among adolescents

Variable	Knowledge			Attitude			Self-efficacy		P value
	COR	AOR	P value	COR	AOR	P value	COR	AOR	
Khat status									
Ever	1			1	1		1		
Current	0.593			0.214	0.123*	0.011	1.524		
Intermittent	3.200			0.327	0.163		0.593		
Never	1.537			0.601	0.476		2.260		
Family History of Khat									
Father	1	1		1			1		
Brother	.618	0.584		0.675			1.722		
Cousin	.417	0.347*		1.485			1.329		
Mother	.907	0.784		2.376			0.886		
Relative	.628	0.523		1.056			1.129		
Accessibility									
Properly Impossible	1.772			0.848			0.571	0.395	
Very difficult	0.299			0.170			0.952	1.230	
Fairly difficult	1.142			2.176			0.455*	0.372*	0.001
Fairly easy	1.639			1.762			0.521*	0.450*	0.001
Very easy	1			1			1	1	
Descriptive Norms (Classmate chew Khat once per month)									
None	1			1			1		
Few	2.024			0.884			1.199		
Most	1.060			0.804			1.090		
Almost all	0.000			0.000			2.1		
Subjective norms (best friends and family think about you if you are a chewer)									
They would be angry with me	1			1			3.824	3.101	
They would be a little upset	1.842			1.015			5.000	5.625	
They would not care one way or other	1.842			2.537			3.750	5.495	
They would accept me	0.789			0.677			45.00*	54.33*	0.001
They would be glad	1.316			1.015			1	1	
Most students think it is wrong for other students to chew Khat.									
Strongly disagree	1.212			1.258			1.467	1.210	
Disagree	0.970			2.061			0.585	0.411	
Neutral	0.875			1.793			3.442	2.482	
Agree	0.844			1.871			0.956	0.846	
Strongly agree	1			1			1	1	

Further research is needed to understand better the factors influencing an individual's decision to chew khat and develop effective prevention and intervention strategies. By increasing our understanding of the knowledge, attitude, and self-efficacy of khat chewing, we can develop more effective approaches to reducing the prevalence of this practice and promoting healthier behaviors.

CONCLUSION

In conclusion, the study assessed students' knowledge, attitude, and self-efficacy of khat chewing. The findings revealed significantly poor knowledge and awareness of the negative health effects of khat chewing as well as poor self-efficacy to resist it. However, their attitude towards this habit was still positive. Despite the growing awareness of the health risks associated with

khat chewing, the practice among students remains prevalent, especially in cultures with deep roots. This suggests that more efforts are needed to educate students on the health risks associated with khat chewing and promote alternative forms of recreation and leisure activities that can help reduce its prevalence. This could include developing community sports programs, cultural events, and other recreational activities that can serve as alternatives to khat chewing. Ultimately, these efforts can help individuals make informed decisions about their health and well-being and promote healthier lifestyles.

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