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Shisha Use and Its Associated Factors Among Somali Youth Living in Eastleigh, Nairobi, Kenya

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Abstract: This study aimed at determining shisha use and its associated factors among Somali Community youth living in Eastleigh in Nairobi. A researcher-developed questionnaire was presented to the participants asking demographic and socioeconomic characteristics with their use of shisha to collect data in selected households. Both descriptive and inferential statistics using SPSS version 23 was used in analyzing data. Findings indicated a high prevalence of shisha use, comorbid use with other psychoactive substances that include khat, other tobacco products, alcoholic beverages and prescription medications. Reasons for use included peer pressure, social acceptability, parental use and affordability. We recommend psychoeducation on the effects of shisha to target both parents and the youth in prevention of shisha use among Somali community.

Keywords: Shisha, Psychoactive Substances, Youth, Households, Psychoeducation

1. Introduction

Shisha use is now a global public health burden among the youth, [1] that needs to be addressed through surveillance intervention and development of policies that regulate the framework of use, [2]. The geographical spread of shisha use among adolescents and young adults is geographically alarming due to 'café' culture, the rising use of social media, and the Internet and lack of policies that regulate the same. In addition, shisha is being used especially for social gatherings and liked due to its various flavours, [3]. It has also been seen to be growing rapidly in the Eastern Mediterranean countries, [4] and perceived to be less harmful than the other tobacco use, [4, 5]. The users of shisha believe that when tobacco is filtered, it lowers the risk of tobacco effects, [2, 6, 7]. Furthermore, studies have found it to be common among the Muslim communities compared to other religious populations, [8] and more likely socially acceptable than cigarette smoking, [2, 7, 9].

Shisha use has been found to be a risk factor for mental health problems especially depression, [10], and physical illnesses that include pulmonary disease, coronary heart disease, and pregnancy complications, [11-12]. A systematic review, Aki et al, 2010 [12] found out that shisha use has a number of health problems that include cancers (lung, bladder, nasopharyngeal, oesophagal cancers), respiratory illness, low birth weight, infertility, and hepatitis C infection (when used in groups). Second-hand shisha smoke leads to unclean indoor air and occupational safety, [13].

Shisha use has been associated with chewing of Khat (a widespread habit among the Somali community) and has social acceptance specifically among women, [14]. In addition, most shisha users do not even know that shisha has any health risks, [2, 15].

Although studies indicate that shisha use is increasing rapidly globally, measures have mostly used university students, [16]. Prevalence is relatively low for certain sub-

groups and countries not commonly associated with shisha use, [16]. With the above, it is important to determine the prevalence and associated risk factors for shisha use, in this Nairobi suburb that is predominantly occupied by Somali community, who happen to be mostly Muslim.

2. Methodology and Study Design

2.1. Settings and Study Population

This survey was conducted among young people (between ages 18-25) of Somali Community living in Eastleigh suburb in Nairobi. Eastleigh Section 1 was conveniently sampled because it was learned that in this area has a higher psychoactive use among Somali Community due to a high number of immigrants. This area was learned to have approximately 9.408 households, and 270 households were sampled with the aim of interviewing only one young person per household.

2.2. Ethical Considerations

The Kenya Methodist University Ethics Committee approved this study that sets forth research ethics concerning personal data. After this approval, these researchers got authority from the Ministry of Education, (Research Department) and the Nairobi Provincial Administration (Pumwani Division) before collecting data. The researchers explained the purpose, plan and implications of the study to the provincial administration and the participants. A cover letter was obtained from the provincial administration explaining the purpose, plan and implications of the study that was presented to the participants. The participants were also informed that data participation was voluntary, with no payment and they could discontinue at any stage of the study without a penalty. They were also informed that collected data would be kept confidentially, and no names or any other identification data would be recorded and that data analysis would be done in groups but not individually.

2.3. Study Procedures and Instrumentation

We visited the sampled households and presented the questionnaires to consenting youth participants. The filled in questionnaires were folded and placed in a sealed box and later transported to the data analysis centre.

2.4. Data Management and Analysis

Data were entered into a computer and analysed using SPSS Version 23 to produce both descriptive and inferential statistics. Descriptive statistics indicated family and individual socioeconomic characteristics; use of shisha based on demographic characteristics and comorbidity of shisha and other psychoactive substances. Inferential statistics used chi-square t-test to identify significant variations of the user based on demographic and environmental characteristics.

3. Result

3.1. Family and Individual Social Economic Background of Participants

This study sought to find out the occupation, living conditions, family income, and marital status of parents and whether participants were born in Eastleigh or elsewhere. The majority (42.7%), were unemployed while 23.9% reported they were students and 18.8% were employed, the self-employed and those engaged in business were 9.4% and 5.2% respectively. Most reported to live with parents, (34.7%), while 12.2% live with other relatives, 10.3% live alone while 9.9% live with parents and other relatives and 8.0% live with friends. The majority 70.9% reported to have moderate family income. 67.1% had married parents; while 56.8% reported do have been born in Eastleigh.

Table 1. *Indicates family and individual socio-economic background.*

Family and Individual Socio-Economic Background		Count	Column N%
Occupation	Self employed	20	9.4%
	Business	11	5.2%
	Employed	40	18.8%
	Unemployed	91	42.7%
	Student	51	23.9%
Living Conditions	I live with my parents	74	34.7%
	I live with relatives	26	12.2%
	I live with friends	17	8.0%
	I live alone	22	10.3%
	I live with parents and other relatives	21	9.9%
	I live with spouse/partner	40	18.8%
	Other	13	6.1%
Family income	Very High	2	.9%
	High	16	7.5%
	Moderate	151	70.9%
	Low	28	13.1%
	Very Low	11	5.2%
	I do not know	5	2.3%
Parents married?	No	70	32.9%
	Yes	143	67.1%
Born in Eastleigh	No	92	43.2%
	Yes	121	56.8%

3.2. Prevalence of Shisha use Per Socio-demographic Characteristics

Table 2. *Shisha use per Socio-demographic Characteristics.*

Socio-Demographic Characteristics		Shisha Use			
		Yes		No	
		n	N%	n	N%
Gender	Male	35	51.5%	89	61.4%
	Female	32	47.1%	56	38.6%
	Other	1	1.5%	0	0.0%
Age in years	18-19	13	19.1%	39	26.9%
	20-21	15	22.1%	23	15.9%
	22-23	17	25.0%	34	23.4%
	24-25	23	33.8%	49	33.8%
Parents marital Status	No	16	23.5%	54	37.2%
	Yes	52	76.5%	91	62.8%
Born in Eastleigh	No	34	50.0%	58	40.0%
	Yes	34	50.0%	87	60.0%
Highest level of education attained	Primary and Below	15	22.1%	37	25.5%
	Secondary Education	25	36.8%	55	37.9%
	Middle College Education	10	14.7%	5	3.4%
	Certificate	10	14.7%	16	11.0%
	Diploma	8	11.8%	25	17.2%
	Undergraduate Education	0	0.0%	7	4.8%

Males indicated a high shisha use of 51.5% compared to females who reported 57.1% use. Based on age in years those with higher age bracket of 24-25 and 22-23 indicated a higher use of 33.8% and 25.0% compared with lower age bracket of 20-21 and 18-19 that reported 22.1% use and 19.1% use. Those whose parents are married has higher shisha use of 76.5% compared to those whose parents are not married who reported use to be 23.5%. Whether born in or out of Easleigh, both reported same use of 50.0%. Based on Educational level, higher use is among those with secondary education reported use at 36.8% and primary and below education level of 22.1% and lower among middle college education, certificate both at 14.7%, diploma at 11.8% and undergraduate at 0.0%.

3.3. Comorbidity of Shisha Use and Other Psychoactive Substances in Percentages

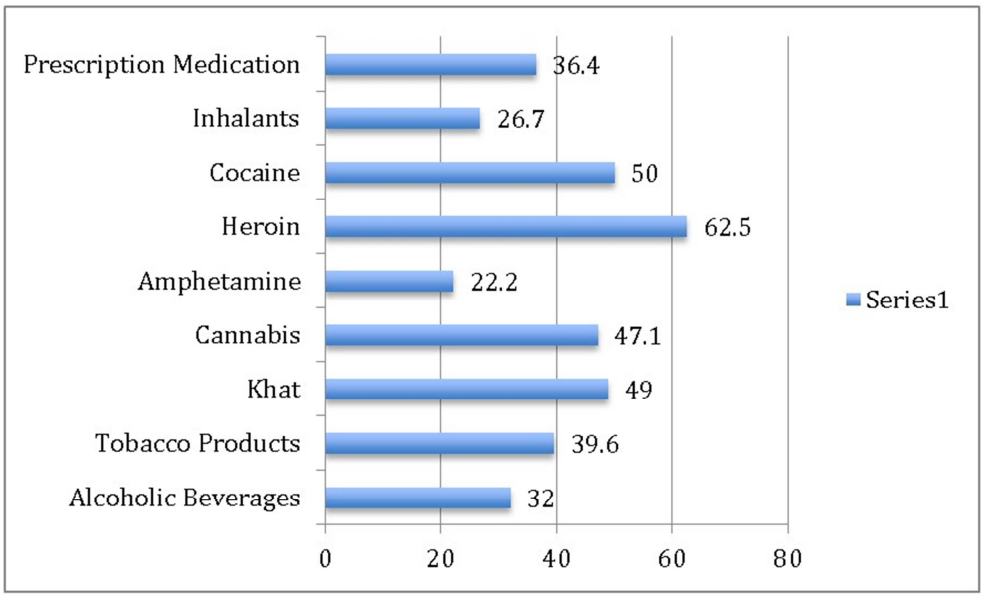

Figure 1. *Comorbidity of Shisha use and other Substance Use.*

Shisha is used with other psychoactive substances, heroin at 62.50%, cocaine at 50.00%, khat at 49.00%, cannabis at 47.01%, tobacco at 39.60%, prescription medication at 36.40%, alcohol at 32.00%, inhalants at 26.70% and amphetamine type at 22.20%.

3.4. Given Reasons for Shisha Use

Table 3. *Given Reasons for Psychoactive Substance Use.*

Main reason for the using the psychoactive substance use		
Peer Pressure	35	66.0%
Socially acceptable	25	41.14%
To exposure to others	16	30.2%
Parental use	1	1.9%
Affordable	1	1.9%

35 (66.0%) indicated reason for use as peer pressure, 41.14% cited social acceptability, while 16 (30.2%) indicated exposure from others. Parental use and affordability was I (1.9%) each.

4. Discussion

This study aimed to determine the prevalence and patterns of shisha use among participants.

4.1. Introduction

This study found a high return rate of 86.94%. This is in line with other studies among the youth on the prevalence of shisha, [5] which registered a return of 94%. This is attributed to the fact that proper sensitization was given both to the area administration and the participants. The research assistants were also very familiar with the area and could easily reach the participants.

4.2. Prevalence of Shisha Use

Shisha use was found to be at 31.9%. This is similar to what was found in a recent study among the youth in the United States, [17] at 38.1% and that found among Florida high school students (22.5%) in 2014, [18]. However, in a study of emerging drugs in Mombasa and Nairobi, Kenya, Kihuthia-Gathu et al 2013 [19] reported that over 25% of youth between 26-35 years of age abused shisha. This difference could have been due to not including younger youth of between 18-25 years of age and the fact that this study was among a specific population living in a specific area in Nairobi. However, compared to another study in the United States, Primack, et al, 2008 [20] reports a higher prevalence of 40.5% among university students.

Males were found to have a high of 51.5% use of shisha compared to the females who reported a higher use of 57.1%. This is similar to other studies globally; [4, 21] among school going children in Israel, where 41% were found to use shisha. Those with a higher age bracket among this group reported a higher shisha use compared to those who are younger.

Those whose parents are married reported a higher (76.5%) shisha use compared to those whose parents were not married (23.5%). No study was identified that indicated marital status of parents and shisha use by these researchers. However, Al-Rawi et al, 2018 [22] found out that parents influenced use at 48.4% among Dental School Students in the United Arab Emirates. In addition, Varsano et al, 2003 [21], in a study of shisha use in Syria, reported that 40% of users have parents who are ex-users of shisha, while about 25% use with parents socially. Those with secondary education had higher shisha use among these participants. Studies have indicated a late onset of shisha use unlike other tobacco use, [18], with about 22.4% secondary school current use in Florida, USA

4.3. Comorbidity of Shisha with Other Licit Psychoactive Substances

This study reported shisha is used with khat at 73.5%. This is in line with other studies. Fufa et al, 2017 [23] reported that undergraduate students of a university in Ethiopia who used shisha also used khat at 36.4%. Findings also indicated that those who used shisha, 52.9% used other tobacco products. This is similar to other findings, Varsano et al, 2003 [21] among Israel youth, Rath, et al 2012 [24] that reported 30% tobacco use among youth. Other studies have identified that shisha users are more likely to also smoke other tobacco products, [25-26]. 35.9% of those who used shisha also used alcohol. This is similar to findings of Shepardon & Hustad 2016 [26] who reported 11.95% alcohol use with shisha among college students. However Schilling et al, 2017 [27] associated shisha use with a higher alcohol use of 99.7% among German University Students. A recent cross-sectional study of factors associated with electronic cigarette, tobacco and conventional cigarette among Australian adolescence, William & White, 2018 [28] found out that those who used shisha were less likely to use cannabis and alcohol.

4.4. Given Reasons for Onset Shisha Use

Some of the reasons given for onset shisha use included peer pressure, (66.0%), social acceptability, (41.14%) exposure from others, (30.2%), parental use and affordability both at 1.9%. Peer pressure was main reason given for shisha use among these participants at (66.0%). Aki et al, 2013, [9] in a study among school and university students in the Middle East and the Middle East immigrants to the western world, identified peer pressure as one of the reasons this population used shisha. Social acceptability was given as the second reason for shisha use, at 41.14%. This is in line with other studies. Smith et al, 2011 [29] indicated that high school students in San Diego County took shisha because it was more socially acceptable compared to cigarette smoking. 30.2% reported that they used shisha because of exposure from others. This is in line with findings of Chaouachi, 2009 [30] that pointed out that shisha use among individuals was due to being exposed by others, in most regions.

5. Conclusion

Shisha use is prevalent among young adults living in Eastleigh suburb of Nairobi, with males indicating a higher prevalence than females. In addition, higher prevalence is among those whose parents were married, parents were using shisha presently or used before, and those with at least a secondary education. Shisha use was highly used with khat

and other tobacco products and reasons given for use included peer pressure, social acceptability, exposure from others, parental use and affordability.

6. Recommendations

Prevention of shisha use among Somali youth community should target not only the youth but also psychoeducation on the effects of shisha use on both the youth and their parents. Those whose parents use khat and shisha should be the main targets. Other researchers should do more studies on this community on the use of shisha and other psychoactive substances.

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