

Socio-Demographic Factors Associated with Alcohol Use Among Persons Aged 18-35 Years in Kangundo North Ward, Machakos County, Kenya

Joseph Ndambuki Makau*, Dennis Gichobi Magu**, Susan Njoki Mambo**

*Department of Environmental Health and Disease Control, College of Health Sciences, School of Public Health, Jomo Kenyatta University of Agriculture and Technology, Kenya

Email: cjomakau@gmail.com, susan.mambo@jkuat.ac.ke, magudennis@gmail.com

Abstract:

Alcohol use among youth slows the progress towards Kenya vision 2030 that envisages a healthy population free from the impact of alcohol abuse in order to attain the highest possible level of physical, social and mental health. Despite the increase of global alcohol use, there is limited data the factors associated with alcohol use among persons aged 18-35 years in Kenya. The study aimed to determine the socio-demographic factors associated with alcohol abuse among persons aged 18-35 years. This was a cross sectional study among 310 persons in Kangundo North ward. Probability Proportionate to size sampling was utilized to select the study sample and a structured questionnaire was used to collect the data. Both descriptive and inferential statistics that included univariate and multivariate logistic regression was used to analyse the data using STATA version 14. Ethical clearance was granted by Baraton University ethics board and NACOSTI. The study found significant association between gender, education level and income status of the respondents. It was concluded that alcohol is associated with male gender, education level and income. The study recommends need to strengthen various policies and programmes and accordingly make changes to address the factors focusing on males. The study findings will help the Machakos County government to design targeted interventions to address alcohol abuse

Keywords —Alcohol, Alcohol use, Social-demographic factors

I. INTRODUCTION

Alcohol is one of the psychoactive substances with dependence-producing properties and widely used in many cultures for centuries. Globally, the harmful use of alcohol is a problem and has resulted in millions of deaths, injury and violence. It is attributed to 5.1 % of global burden of disease and

13.5 % of the total deaths in age group 20–39 years. According to WHO, alcohol use is the world’s third largest risk factor for disease and disability; in middle-income countries, it is the greatest risk. According to UNDOC, harmful alcohol and substance use has multiple direct effects on adolescents and youth. The likelihood of unemployment, physical health problems,

dysfunctional social relationships, suicidal tendencies, mental illness and even lower life expectancy is increased by substance use in adolescence. In the most serious cases, harmful drug use can lead to a cycle in which damaged socioeconomic standing and ability to develop relationships feed substance use (UNDOC, 2018).

In Africa, alcohol use is on the rise, the region has the highest prevalence of heavy episodic drinking with 46% of women and 59% of male drinkers engaging in it weekly. Almost half (43%) of the people living in that region were under 14 years old ((Ferraria *et al.*, 2017). In Kenya, Use of alcohol and other substances is a social behaviour which is embedded in communities and cultures and is sustained by supply. The NACADA 2017 survey of revealed that 12.2% of respondents aged 15 – 65 years are currently using alcohol; 15.1% of respondents aged 25 - 35 years are currently using alcohol; 5.6% of respondents aged 15 – 24 years are currently using alcohol; and 0.9% of respondents aged 10 – 19 years are currently using alcohol.

Alcohol consumption in rural Kenya has been on the rise with a prevalence rate of 29.6 per cent compared to 31.7 per cent in urban area. The prevalence of alcohol use disorders among respondents aged 15 -65 years stands at 10.4% in 2017(NACADA, 2017). According to a study by Kaithuru and others, alcohol is a major threat and a challenge to a progressive economic development. Employees who abused alcohol showed irregularity in work attendance, low productivity, hangovers, stress, financial problems, and health and safety risks (Kaithuru *et al.*, 2015). In a study by Boitt and others there was a significant association between the year of study of the students, marital status, family's economic status and the living arrangements (with whom) and the prevalence of alcohol abuse(Boitt *et al.*,2016)

In Machakos County where the study area is located, drug and Substance abuse especially alcohol is a leading health problem according to a survey done on adolescents and youth(NAYS,2015). Youth begin drinking early, often during adolescence and this is likely to prolong lifetime consumption and subject the user

to an increased progression of alcohol use disorders (Stanley *et al.*,2011).

II. METHODS AND MATERIALS

The population of this study were 310 youths aged 18-35 years residents of Kitwii location, in Kangundo Northward Kenya. Probability proportionate to Size Sampling and random sampling were used to select the sample in the study. The study area was randomly selected using Cochran's 1999 method, the sample size of 310 respondents was determined. Ethical clearance was granted by Baraton University ethics and review board and NACOSTI for approval of research. Respondents who were permanent residents of Kitwii location and gave written informed consent were included in the study. The socio-demographic information related to alcohol abuse among persons aged 18-35 years was obtained by use of a questionnaire with six items which included gender, age, income, education level, marital status. Descriptive statistics such as frequencies, percentages was used to analyse the data. Associations between selected variables were tested using logistic regression. The test of significance was set at $\alpha = 0.05$ significance level. The analysis was done using STATA version 14.

III. RESULTS

A. *Socio-Demographic Factors Associated with Alcohol use among persons aged 18-35 years.*

The study sought to examine the socio-demographic factors associated with alcohol use among persons aged 18-35 years. The participants included 310 youths from 8 villages in Kitwii Sub location, Kangundo Northward. The findings are shown in Table 1.

Table 1 Socio demographic characteristics of study participants

Characteristic	Alcohol Use	
	Yes n (%)	No n (%)
Gender		
Male	216 (86.40)	42 (70.00)
Female	34 (13.60)	18(30.00)
Marital Status		
Single	160(64.00)	42(70.00)
Married	77(30.80)	16(26.67)
Divorced	8(3.20)	1(1.67)
Widower	0(0.00)	1(1.67)
Cohabit	5(2.00)	0(0.00)
Age		
18-24 years	224(89.60)	50(84.75)
25-29 years	21(8.40)	8(13.56)
30-35 years	5(2.00)	1(1.69)
Education		
Tertiary	44(17.60)	12(20.00)
Secondary	138(55.20)	34(56.67)
Primary	57(22.80)	11(18.33)
None	5(2.00)	0(0.00)
Vocational training	6(2.40)	3(5.00)
Income		
0-5000	94(37.60)	24(40.00)
5000-10000	94(37.60)	18(30.00)
10000-15000	34(13.60)	7(11.67)
15000-20000	12(4.80)	4(6.67)
Above 20000	16(6.40)	7(11.67)

Employment	Yes n (%)	No n (%)
Formal employment	28(11.29)	9(15.25)
Self employed	62(25.00)	14(23.73)
Casual	102(41.13)	30(50.85)
Unemployed	3(1.21)	0(0.00)
Others	53(21.37)	6(10.17)

B. Univariate Analysis

As indicated in the table below, the significant factor at the univariate level is gender, education and income level, since the p value is less than 0.05

Table 2 Univariate analysis for socio demographic factors associated with alcohol intake

Alcohol Abuse	Odds Ratio	Std. Err.	z	P>z	95% Conf.	
Age category	0.896	0.16	-0.58	0.56	0.61	1.29
	2.722	0.91		0.00	1.40	5.26
Gender	7	69	2.97	3	7	8
Marital Status	1.463	.260	2.14	0.03	1.03	2.07
Educational level	1.693	.225	3.95	0.00	1.30	2.19
Income level	1.320	.175	2.09	0.03	1.01	1.71
Employment	1.187	0.13	1.46	0.14	0.94	1.49
	8	97		3	3	6

C. Multivariate Analysis

The multivariate analysis showed that being a male was significantly associated with alcohol intake. The odds ratio is 2.16 implying that a male is 2.16 times more likely to take alcohol compared to being a female. Having secondary education is significantly associated with alcohol intake. The

odds ratio is 3.44 implying that having respondents having secondary education were 3.44 times more likely to consume alcohol compared to a person who those who had no education. Having tertiary education was significantly associated with alcohol intake. The odds ratio is 6.22 implying that having tertiary education you are 6.22 times more likely to consume alcohol compared to a person who has no formal education. The study participants who earned between 10000 and 15000 were 3.93 times more likely to consume alcohol compared to those who earned below 5000.

Table 3 Multivariate analysis for socio demographic factors associated with alcohol use

Alcohol Intake	Odds Ratio	Std. Err.	z	P>z	[95% Conf. Int.]	Inte rval]
Sex						
Male	2.155	0.8225	2.01	0.044	1.01	4.536
Female	Referen ce					
Marital Status						
Cohabit	0.2546	0.2001	1.74	0.082	0.06	1.182
Divorced	0.3911	0.987	1.85	0.065	0.16	1.03
Married	0.7542	0.638	0.81	0.42	0.48	0.970
Single	Referen ce					
Education Level						
Others	0.8406	0.079	0.21	0.837	0.17	4.3793
Primary	2.3203	0.428	1.57	0.116	0.812	6.6297
Secondar	3.4425	1.616	2.50	0.013	1.31	9.09

y	03	979	1	12	092	512
		3			9	9
		4.5			1.5	25.
	6.2191	037	2.5	0.0	042	712
Tertiary	88	0	2	12	6	3
No education	Referen ce					
Income level						
		2.5			1.1	
	3.9129	055	2.1	0.0	155	13.
10-15000	57	0	3	33	0	725
	2.2897	1.0	1.8	0.0	0.9	5.4
5-10000	28	088	8	6	655	301
Above-20000	0.5192	0.5432	0.63	0.531	0.0667	4.0361
0-5000	Referen ce					
					0.2	2.2
	0.7755	0.4164	0.47	0.636	0.707	215
_cons	03	164	7	36	1	3

IV. DISCUSSIONS

The study yielded important findings to determine the factors associated with alcohol use. Majority (86%) of the respondents who used alcohol were male. Female gender accounted for 14%. This is consistent with the findings of Wilsnack and others in 2009 that found that alcohol use was consistently more among the men than women (Wilsnack et al.,2009). Majority of the respondents (37%) earned an Income less than 5000 while 64% were single. This is similar to the findings of Wang and others who noted young age, single marital status, and low family income may be potential risk factors for comorbid alcohol disorders. (Wang et al.,2004).6% of respondents earning a higher income of above 20000 are drinkers. This is inconsistent with the findings of Collins 2016 which indicated that people with higher status may consume similar or greater amounts of alcohol compared with people with lower status (Collins,2016).

Having secondary education is significantly associated with alcohol intake. The study revealed

that individuals with secondary education were 3.44 times more likely to consume alcohol compared to a person who had no education. Youths having tertiary education were 6.22 times more likely to consume alcohol compared to a person who has no formal education. The study revealed the age at initiating alcohol, 52.8% for 18-24 years, 33.2% for 10-17, 11.6% for 25-29 years and 2.4% for 30-35 years. The mean age for initiating alcohol use was 18 years. The findings slightly differed with the findings of Maharjan in 2017 that 17 years was the mean age of alcohol initiation among the youth (Maharjan.2017). The current study findings revealed a high drinking rate with majority 51.93% indicated that the last time to take alcohol was in the last two weeks. Our findings were lower than the findings of Magu and others who noted that the drinking rate was 60-90% ((Magu *et al.*,2015). 34.80% respondents indicated that they consume between one and two bottles

V. CONCLUSIONS

This study found that social demographic factors associated with alcohol abuse among participants were: Male gender, having secondary and tertiary education and high socioeconomic status was significantly associated with alcohol abuse.

ACKNOWLEDGEMENT

We acknowledge Dr. Dennis Magu and Dr. Susan Mambo, Jkuat staff, Mr. Daniel Kituku, Chief Kitwii location for support in data collection, study participants for actively participating in the study.

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