

Demographic Correlates of Alcohol Use among Male Teachers in Public Schools in Murang'a County, Kenya

Wairimu Agnes¹, Asatsa Stephen, PhD², Njiru Lucy, PhD³

^{1, 2}The Catholic University of Eastern Africa

³Amref Intentional University

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ABSTRACT

Alcohol use is considerably rampant among teachers and has impacted negatively on teaching and learning especially in public schools where productivity of teachers is extremely low, giving rise to a worrying trend. This study sought to establish demographic correlates of alcohol use among male teachers in Muranga County in Kenya. The study adopted the descriptive research design. The target population was 2642 male teachers employed by the Teacher Service Commission in secondary schools with a study sample of 422 participants. Data were collected using standardized questionnaires, the Alcohol Use Disorders Identification Test (AUDIT). Data were analyzed using descriptive statistics. The study reported significant demographic differences in alcohol consumption among male teachers in Muranga. The study recommends design of treatment and preventive strategies that are customized to address the demographic characteristics of the affected persons.

Key Words: Addiction, Drug Use Teachers, Substance Use Disorders

INTRODUCTION

Harmful use of alcohol is associated with social, economic, psychological and physical consequences on individual, family, and the community with increased propensity for toxicity, injuries, and violence Jacob, MacArthur, Hickman & Campbell (2015). Alcohol use is linked to increased risk of accidental injuries, suicides, murders, and domestic violence. According to Takahashi, Wilunda, Magutah, et al., (2017), the magnitude of alcohol consumption varies geographically, with highest quantities of recorded alcohol use reported in high-income countries; According to Jacob, et al. (2015) alcohol abuse commences during adolescence and young adulthood progressing into adulthood. This age cohort has been reported to engage in hazardous and harmful alcohol use practices characterized by regular, intoxication, and binge drinking. Their alcohol use is influenced by family and social environment. They commence alcohol consumption within the family, with parental knowledge. Thus, there are family related factors that promote alcohol use; family conflict, poor communication, parental drinking, and permissiveness (Sacco, Bucholz, & Harrington, 2014). Rossow, Keating, Felix & McCambridge (2015) observe that a parent who abuses alcohol is a risk factor for children becoming while having siblings who misuse alcohol is even stronger risk factor towards other sibling drinking. Additionally, family conflict has been linked to adolescent alcohol abuse either directly, or through reduced effectiveness of parental monitoring (Mattick, Clare, Aiken, et al., 2018). Importantly, the parental attitude that favors antisocial behavior tends to increase the risk of children abusing alcohol (Rossow, Felix, Keating, & McCambridge, 2016). The peers and social norms determine adolescent alcohol use behavior (Teunissen, Spijkerman, Prinstein, et al., 2012). In this regard, as one grows social contacts expands and friends' approval influence consumption of alcohol (Kelly, Chan, Toumbourou, et al., 2012).

According to Gitatui, Kimani, Muniu, and Okumbe (2019), individuals with higher educational attainment and earnings consume more alcoholic drinks per session as well as drink most days of the week. The study

further postulate that educational status is a marker of social economic status and those with higher education are formally employed, with higher earnings, thus can afford alcohol. Educational institutions are the main socialization agents; people who spend substantial time in school may commence alcohol consumption as part of socialization, peer pressure, school-related stresses and financial security compared to people who spend less time in schooling (Kumar, Kumar & Singh, 2018). The prolonged schooling acquired drinking behavior could continue into adulthood resulting into alcohol dependence and abuse later in life (Rossow, et al., 2016).

Balogun, Koyanagi, Stickley, Gilmour & Shibuya (2014) assert that in a regional report from Uganda, Ethiopia, Ghana and Nigeria, individuals with high education drank more while Yawson, Welbeck & Agyenim (2015) posit that those with higher socioeconomic status are associated with higher alcohol consumption at old age, with income showing an association between moderate and heavy drinking.

However, negative relationships between educational status and/or socioeconomic status and traditional alcoholic beverages consumption have been reported mainly because of affordability and availability (Rao, Schofield, Ashworth, 2015). The study further notes that traditional alcoholic beverages are widely available in rural communities, often at a cost most people can afford for which alcohol pricing has long been recognized as a tool for the control of alcohol abuse.

Southern African countries (Namibia and republic of South Africa) top in alcohol consumption compared to their neighboring nations. In East Africa, Kenya (31.7%) and Uganda (28.6%) have highest alcohol consumption rates, respectively, with proportions higher in urban relative to rural settings (Takahashi, Wilunda, Magutah, et al. 2017). The purpose of this study was to examine the demographic factors that may be contributing to consumption of alcohol among teachers in public secondary schools with the aim of comparing the findings with other geographical regions.

METHODOLOGY

According to Creswell (2014), research design is the overall strategy one chooses to integrate different components of the study in a coherent and logical way, thereby ensuring the researcher effectively addresses the research problem. This study adopted the descriptive research design with a study sample of 422 participants selected through cluster sampling method. Eight sub counties in Muranga County were selected ensuring regional balance after which screening for alcohol use among teachers was done. Only the teachers who indicated to be alcohol consumers were included in the study.

Research Instruments

The study used the Alcohol Use Disorders Identification Test (AUDIT) to assess the alcohol consumption prevalence in the sample. The Alcohol Use Disorders Identification Test (AUDIT) is a 10-item screening tool developed by the World Health Organization (WHO) to assess alcohol consumption, drinking behaviors, and alcohol-related problems (Babor et al., 2001). Each question has a possibility for five responses ranging from 0 to 4, indicating “never,” “less than monthly,” “monthly,” and “weekly”. Scores on the AUDIT can be obtained by entering a number (based on the participant’s response) for each question to the far right column. A total score of 8 or more will indicate hazardous and harmful alcohol use, and possible dependence. The AUDIT has been validated across genders and in a wide range of racial/ethnic groups and is well suited for use, (Saunders, Aasland, Babor, Fuente, & Grant, 1993).

RESULTS

Data were analyzed using ANOVA and Chi Square and the results are indicated below.

Age Differences in Alcohol Use among Teachers in Muranga County, Kenya

The study sought to identify the age differences in alcohol consumption among teachers in Muranga. The results are presented in Table 1.

Table 1: Age Differences in Alcohol Use

Age	Alcohol Use Severity Levels (%)			Total
	Low Risk Use	Harmful Consumption	Severe Alcohol Use Disorder	
20-29	60.33	12.40	27.47	100.00
30-39	47.60	6.02	46.39	100.00
40-49	30.33	3.37	66.29	100.00
50-60	28.26	4.35	67.39	100.00

The findings indicate that severe alcohol consumption was associated with older age with 66.29% of age 40-49 years and 67.39% of age 50-60 years reporting severe alcohol use. Younger participants (60.33%) reported higher low risk alcohol use. This may be attributed to the fact that most of these teachers may have worked for a long time having consumed alcohol for longer time compared to the younger teachers who are barely few years into their career and therefore still at experimental stage of alcohol consumption. A Chi-square test was conducted to test for significance in the age differences in alcohol consumption severity and it was revealed that there was statistically significant age differences in alcohol use severity among teachers in Murang'a. $X^2(6,422) = 41.75, P < .005$, with older teachers being high risk compared to younger teachers.

Academic Qualification Differences in Alcohol Use among Teachers in Murang'a

The study sought to identify the academic qualification differences in alcohol consumption among teachers in Murang'a. The results are presented in Table 2.

Table 2. Academic Qualification of Differences in Alcohol Use

		Alcohol Use Severity Levels (%)			Total
		Low Risk Use	Harmful Consumption	Severe Alcohol Use Disorder	
Academic Qualification	Diploma	34.12	9.42	56.47	100.00
	Degree	52.13	5.67	42.20	100.00
	Masters	30.77	9.62	59.62	100.00
	PhD	0.00	33.33	67.67	100.00

The findings indicate that severe alcohol use was higher among participants with higher academic

qualifications (PhD at 67.67% and Masters at 59.47%). However diploma holders reported higher prevalence of severe alcohol use at 56.47 % compared to degree holders at 42.20 %. The average scholar therefore recorded these high figures in all the three aspects of alcohol use severity levels.

A chi-square test was performed to test for significance of the revealing statistically significant differences $X^2(6,422) = 18.76, p < 0.05$. This implies that teachers’ academic qualifications significantly affected the level of their alcohol consumption.

Marital Status Differences in Alcohol Use among Teachers in Muranga

The study sought to identify the marital status differences in alcohol consumption among teachers in Muranga. The results are presented in Table 3

Table3: Marital Status Differences in Alcohol Consumption

		Alcohol Use Severity Levels (%)			Total
		Low Risk Use	Harmful Consumption	Severe Alcohol Use Disorder	
Marital Status of Participants	Single	69.16	13.08	17.76	100.00
	Married	37.54	4.10	58.36	100.00
	Divorced/Separated	35.00	15.00	50.00	100.00
	Widowed	50.00	50.00	0	100.00

The findings showed that 58.36% of married men reported severe alcohol severity as compared to 17.76% of the unmarried participant. This could imply that many married men engage in severe alcohol consumption because probably they have stress associated with the family and hence end up with severe alcohol disorders.

A chi-square test was conducted to assess the relationship between marital status and alcohol use severity level and it was revealed that there was statistically significant association between the two variables. $X^2(6,422) = 62.02, p = .000$. This therefore implies that the marital status may affect the level of alcohol consumption.

Family Size Difference in Alcohol Use Among Teachers in Muranga

The study sought to identify the family size differences in alcohol consumption among teachers in Muranga. The results are presented in Table 4.

Table 4: Family Size Difference in Alcohol Consumption

Count		Alcohol Use Severity Levels (%)			Total
		Low Risk Use	Harmful Consumption	Severe Alcohol Use Disorder	
Family size of Participants	1 Person	64.63	14.63	20.73	100.00
	2-4 Persons	37.41	5.40	57.19	100.00
	More than 5 persons	56.45	4.84	38.71	100.00

The results indicate that families with 2 to 4 members reported the highest prevalence of severe alcohol use (57.19%). Families with only 1 person reported the highest low risk alcohol use prevalence (64.663%). Families with more than 5 members recorded 38.71% prevalence of severe alcohol use. This indicates that bigger families experienced more severe alcohol use compared to smaller families. A chi-square test was performed to assess the significance of the relationship between the size of the family and alcohol use severity level and it was revealed that there was a statistically significant association between the two variables. $X^2(4,422) = 39.28, p = .000$ this therefore implies that family size may affect the level of their alcohol consumption.

Religious Affiliation Differences in Alcohol Consumption among Teachers in Muranga

The study sought to identify the religious affiliation differences in alcohol consumption among teachers in Muranga. The results are presented in Table 5.

Table 5. Religious affiliation Differences in Alcohol Consumption

		Alcohol Use Severity Levels (%)			Total
		Low Risk Use	Harmful Consumption	Severe Alcohol Use Disorder	
Religion of Participants	Christian	44.50	6.39	49.10	100.00
	Muslim	93.30	6.70	0	100.00
	Hindu	28.57	14.29	57.14	100.00
	African	20.00	20.00	60.00	100.00

The findings indicate that participants in most of the religions examined in this study fell in the severe alcohol use category except for Muslims who had the highest members in low risk category (93.3%). This could be attributed to the strict moral standards usually associated with Islam.

A chi-square test was performed to assess the significance of the relationship between participants' religion and alcohol use severity level and it was observed that there was a statistically significant association between the two variables. $X^2(8,422) = 29.55, p = .000$ this therefore implies that teachers' religions affect the level of their alcohol consumption.

DISCUSSION

Studies conducted on demographic differences in other locations have revealed varying results. According to Takahashi, Wilunda, Magutah, et al., (2017), high alcohol consumption is associated with high-income countries. The study found that Southern African countries recorded higher prevalence of alcohol consumption compared to other neighboring lower income nations. In East Africa, Kenya recorded 31.7% prevalence compared to Uganda which recorded 28.6% alcohol consumption prevalence.

In terms of age differences, Jacob, et al. (2015) found that alcohol use commences during adolescence and young adulthood progressing into adulthood. This age cohort has been reported to engage in hazardous and harmful alcohol use practices characterized by regular, intoxication, and binge drinking. In our study, contrary results were recorded indicating that older age was associated with more harmful consumption of

alcohol compared to the younger age. This implies that age difference in alcohol consumption is not a universal pattern but could be influenced by other factors not tested in our study.

Other studies have identified family related factors that promote alcohol use; family conflict, poor communication, parental drinking, and permissiveness (Sacco, Bucholz, & Harrington, 2014). Rossow, Keating, Felix & McCambridge (2015) observe that a parent who abuses alcohol is a risk factor for children becoming alcoholics, while having siblings who misuse alcohol is even stronger risk factor towards other sibling drinking. In our study other family factors such as family size and marital status were found to significantly affect alcohol consumption.

Our study findings on education level differences in alcohol consumption found significant differences with higher academic qualification being associated with more harmful alcohol consumption. According to Gitatui, Kimani, Muniu, and Okumbe (2019), individuals with higher educational attainment and earnings consume more alcoholic drinks per session as well as drink most days of the week. They further postulate that educational status is a marker of social economic status and those with higher education are formally employed, with higher earnings, thus can afford alcohol.

Balogun, Koyanagi, Stickley, Gilmour & Shibuya (2014) assert that in a regional report from Uganda, Ethiopia, Ghana and Nigeria, individuals with high education drank more while Yawson, Welbeck & Agyenim (2015) posit that those with higher socioeconomic status are associated with higher alcohol consumption at old age, with income showing an association between moderate and heavy drinking. In our study, economic status was not measured but would be associate with the higher educational attainment which propels one to higher income cadres. However, negative relationships between educational status and/or socioeconomic status and traditional alcoholic beverages consumption have been reported mainly because of affordability and availability (Rao, Schofield, Ashworth, 2015).

CONCLUSION

The understanding of demographic factors in alcohol consumption is a key factor in the design and implementation of treatment and prevention programmes. It is important for treatment agencies to redesign various programmes while factoring in demographic correlates in order effectively address alcohol consumption problems.

REFERENCES

1. Balogun, O, Koyanagi, A, Stickley, A., Gilmour S. & Shibuya, K. (2014) Alcohol consumption and psychological distress in adolescents: a multi-country study. *J Adolesc Health*.54 (2):228–234.
2. Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). California: Sage Publications, Inc.
3. Gitatui, M., Kimani, S., Muniu, S., & Okumbe, O. (2019). Determinants of harmful use of alcohol among urban slum dwelling adults in Kenya. *19(4): 2906-2925*
4. Jacob, N., MacArthur, G. J., Hickman, M. & Campbell, R. (2015). A qualitative investigation of the role of the family in structuring young people's alcohol use. *The European Journal of Public Health*.26 (1):102–110.
5. Kelly, A. B., Chan, G. C., Toumbourou, J. W., et al. (2012). Very young adolescents and alcohol: Evidence of a unique susceptibility to peer alcohol use. *Addict Behaviour*.; 37 (4):414–419.
6. Kumar, K., Kumar, S. & Singh, A. K. (2018). Prevalence and socio-demographic correlates of alcohol consumption: Survey findings from five states in India. *Drug Alcohol Depend*. 2018;185:381–390.
7. Mattick, R. P., Clare, P. J., Aiken. A., et al. (2018) Association of parental supply of alcohol with adolescent drinking, alcohol-related harms, and alcohol use disorder symptoms: a prospective cohort study. *The Lancet Public Health*. ; 3(2):e64–e71.

8. Rao, R., Schofield, P. & Ashworth, M. (2015). Alcohol use, socioeconomic deprivation and ethnicity in older people. *BMJ Open*. 5(8):e007525.
9. Rossow, I., Felix, L., Keating, P., & McCambridge, J. (2016). Parental drinking and adverse outcomes in children: A scoping review of cohort studies. *Drug and Alcohol*
10. Sacco, P., Bucholz, K. K., & Harrington, D. (2014). Gender differences in stressful life events, social support, perceived stress, and alcohol use among older adults: results from a national survey. *Substance Use & Misuse*. 49 (4):456–465.
11. Saunders, J.B., Aasland, O.G., Babor, T.F., de la Fuente, J.R. and Grant, M. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. II. *Addiction*, 88, 791-804, 1993.
12. Takahashi, R., Wilunda, C., Magutah, K., et al. (2017). Correlates of alcohol consumption in rural western Kenya: A cross-sectional study. *BMC Psychiatry*. 17 (1):175.
13. Teunissen, H. A, Spijkerman, R., Prinstein, M. J., et al. (2012). Adolescents' Conformity to Their Peers' Pro-Alcohol and Anti-Alcohol Norms: The Power of Popularity. *Alcoholism: Clinical and Experimental Research*. 36(7):1257–1267.
14. Yawson, A. E., Welbeck, J., Agyenim, B. J., et al. (2015). Socio demographic and Socioeconomic Correlates of Alcohol Use among Older Adults in Ghana. *Journal of Alcoholism & Drug Dependence*. 3(202)