AFRICAN JOURNAL

of DRUG and ALCOHOL STUDIES

In this Issue

MONITORING ALCOHOL ADVERTISING IN AFRICA

ALCOHOL USE IN MALAWI

DRINKING AND VIOLENCE AGAINST WOMEN IN NIGERIA

PATTERNS OF DRUG USE IN BOTSWANA

PATHWAYS TO EARLY SUBSTANCE USE



AFRICAN JOURNAL OF DRUG AND ALCOHOL STUDIES

PURPOSE AND SCOPE

The African Journal of Drug & Alcohol Studies is an international scientific peer-reviewed journal published by the African Centre for Research and Information on Substance Abuse (CRISA). The Journal publishes original research, evaluation studies, case reports, review articles and book reviews of high scholarly standards. Papers submitted for publication may address any aspect of alcohol and drug use and dependence in Africa and among people of African descent living anywhere in the world.

The term "drug" in the title of the journal refers to all psychoactive substances other than alcohol. These include tobacco, cannabis, inhalants, cocaine, heroin, prescription medicines, and traditional substances used in different parts of Africa (e.g., kola nuts and khat).

EDITORIAL AND MANAGEMENT TEAM

EDITOR-IN-CHIEF

Prof. Isidore Silas Obot Centre for Research and Information on Substance Abuse (CRISA) E-mail: iobot@crisanet.org; obotis@gmail.com

DEPUTY EDITORS

West Africa Professor Hope Obianwu Niger Delta University Wilberforce Island, Nigeria

Southern & Central Africa

Professor Charles J. Parry Medical Research Council Cape Town, South Africa E-mail: cparry@mrc.ac.za

Eastern Africa

Prof. David M. Ndetei University of Nairobi Nairobi, Kenya E-mail: dmndetei@mentalhealthafrica.com

Francophone countries

Prof. Baba Koumare Hopital Point G Bamako, Mali E-mail: babakoumare@hotmail.com

Rest of the world

Prof. James T. Gire Virginia Military Institute Lexington, VA, USA E-mail: jtgire@vmi.edu

ASSOCIATE EDITORS

Dr Neo Morojele Medical Research Council Pretoria, South Africa E-mail: neo.morojele@mrc.ac.za

Dr Nazarius Mbona Tumwesigye Makerere University Kampala, Uganda E-mail: naz@iph.ac.ug

Dr Andrew Zamani Psychiatric Hospital Gwagwalada, Abuja, Nigeria E-mail: zamaning@yahoo.com

MANAGING EDITOR

Akanidomo J. Ibanga, CRISA E-mail: akjibanga@yahoo.com

EDITORIAL ASSISTANTS Pam Cerff, *Cape Town, South Africa* Danjuma Ojei, *Jos, Nigeria*

EDITORIAL ADVISORY BOARD

Dr Reychad Abdool, *Nairobi, Kenya* Dr O.A. Ayo-Yusuf, *Pretoria, South Africa* Prof. Moruf Adelekan, *Blackburn, UK* Dr Yahyah Affinih, *New York, USA* Prof. E. E. O. Alemika, *Jos, Nigeria* Dr Pascal Bovet, *Seychelles* Prof. Layi Erinosho, *Abuja, Nigeria* Prof. A.J. Flisher, *Cape Town, South Africa* Dr Axel Klein, *London, UK* Prof. Hope Obianwu, *Benin, Nigeria* D. A. Pritchard, *Swaziland*

Volume 13, Number 1, 2014

CONTENTS

Self- and collateral spouse-reported alcohol use in Malawi: Exploring social drinking norms' potential for alcohol prevention
Monitoring outdoor alcohol advertising in developing countries: Findings of a pilot study in five African countries
Perceived discrimination and social identity as adolescents' pathways to early substance use
Drug use patterns and socio-demographic profiles of substance users: Findings from a substance abuse treatment programme in Gaborone, Botswana 43 Morekwe Selemogwe, Seipone Mphele, & Kegomoditswe Manyanda
Drinking, violence against women and the reproduction of masculinity in Oron, Nigeria

Abstracting/Indexing services:

The journal is indexed/abstracted by the following services: Addiction Abstracts, African Journals Online (AJOL), DrugScope, Applied Social Sciences Index, Social Services Abstracts, Sociological Abstracts, Scopus, Embasse, and PsycINFO.

African Journal of Drug & Alcohol Studies, 13(1), 2014 Copyright © 2014, CRISA Publications

SELF- AND COLLATERAL SPOUSE-REPORTED ALCOHOL USE IN MALAWI: EXPLORING SOCIAL DRINKING NORMS' POTENTIAL FOR ALCOHOL PREVENTION

Henrik Natvig¹, Arne Henning Eide², Matilda Hultberg Døving¹, Annika Linge Hessen¹, Erik Hoel³, Jameson Ndawala⁴, Gloria Azalde², Stine Hellum Braathen², & Alister Munthali⁵

¹Department of Psychology, University of Oslo, Oslo, Norway; ²SINTEF Technology and Society, Department of Health, Global Health and Welfare, Oslo, Norway; ³Department of Public Health, Hedmark University College, Elverum, Norway; ⁴National Statistical Office, Zomba, Malawi; ⁵Centre for Social Research, University of Malawi, Zomba, Malawi

ABSTRACT

Adult (18+ years old) Malawian men and women's alcohol use and social drinking norms were examined. From 31,676 screened households, heads and spouses in 1,795 households with at least one alcohol user were interviewed. Alcohol use last 12 months was reported by 27.3% and 1.6% of all adult men and women respectively. Male and female alcohol users' mean consumption was 8.05 litres and 1.51 litres of pure alcohol respectively. Spouses reported 55 and 61% higher consumption level for their spouses compared to self-reports. Without including non-drinkers, drinking norms explained 6.7% of men's and 20.9% of women's alcohol consumption. Prevention efforts could be directed at helping women not to start drinking by supporting their existing gender-specific descriptive drinking norms.

Key Words: Alcohol, same-sex descriptive norms, household survey, Malawi

INTRODUCTION

This paper examines adult Malawians' alcohol use and whether social norms represent a promising candidate for future alcohol prevention. Alcohol use is learned through socialization processes (Bandura, 1986) and social norms guide adolescents on how and when to use, or not to use alcohol. Norms' maximum expected potential effects on drinking in Malawi is constrained by the size of the correlation between norms and drinking (Hansen & McNeal, 1996).

Corresponding author: Henrik Natvig, Department of Psychology, University of Oslo, PO Box 1094 Blindern, N-0317, Oslo, Norway. Email: henrik.natvig@psykologi.uio.no; Phone: +47 9979 8400

Malawi has a population of 15.9 million (WHO, 2012). It is one of the poorest and least urbanized among the sub-Saharan countries (Eidhammer, 2005). In sub-Saharan countries, alcohol is mainly homebrewed by women and used in rituals, ceremonies, weddings, and on special occasions (Clausen, Rossow, Naidoo, & Kowal, 2009). They consume substantially less alcohol compared to North-America and Europe (Kabiru, Beguy, Crichton, & Ezeh, 2010). Based on WHO's data-collection from 2002-2004, Clausen et al. (2009) estimated from 20 African countries that about 80% of women and 50% of men were nondrinkers. In WHO's (2014) recently published report, 28.3% and 10.6% of 15+ years old Malawian males and females respectively had used alcohol last 12 months in 2010. Martinez, Røislien, Naidoo, and Clausen (2011) found that among Malawian women 92.8% were lifetime alcohol abstainers and only 1.0% considered themselves as current alcohol consumers. This is contrasted by a study of students at the University of Malawi by Zverev (2008) in which 78% (men) and 63% (women) reported to use alcohol. These contrasting studies suggest that students drink substantially more than the general population. Obot (2006) examined the WHO Global Alcohol Database and reported that recorded consumption per Malawian 15+ years was 1.60 litres 100% alcohol in 1961; 2.72 litres in 1971; 1.81 litres in 1981; 1.00 litres in 1991; and 1.44 litres in 2001. He warns that survey data on unrecorded alcohol use is sparse and figures uncertain.

We calculated litres of 100% alcohol from standard units (SU) reported in WHO's data-collection from 2002-2004 (Rossow & Clausen, 2013). Consumption per alcohol user was estimated from SU from Table 1 in Rossow and Clausen (2013). We use Malawian figures in the example, while the neighboring countries below were calculated through the same formula: 12.8 SU per week*52 weeks*10 gram per SU/0.789 specific weight for alcohol/1000 = 8.44 litres per year. Malawian alcohol users consumed about the same as alcohol users in neighboring countries like South Africa (8.50) and Zambia (8.30), and more than in Kenya (5.54), Namibia (5.40), Zimbabwe (6.39), and Swaziland (6.85).

Norms are social by nature and can be understood as common understandings among members of a group of what is considered suitable behavior (Cialdini, Reno, & Kallgren, 1990), and as both explicit and implicit social rules taken for granted (Hogg & Vaughan, 2011). Cialdini et al.'s (1990) Focus theory of normative conduct explains how social norms systematically influence behaviors. The theory divides social norms into injunctive and descriptive norms. Injunctive norms are how we believe those close to us want us to behave in a given situation. Descriptive norms are how we believe most other people behave in a given situation, or which behaviors we perceive as typical or normal (Cialdini et al., 1990). Social norms teach us whether our behaviors are likely to obtain positive or negative reactions if they are endorsed or not (Rimal & Real, 2005).

Alcohol norms are learned by observing and imitating significant other's behaviors and attitudes, as well as through the direct consequences we experience from these same socialization-agents when we drink ourselves (Bandura, 1986). Social acceptance of drinking behaviors varies between and within cultures based on demographic differences such as gender, age, religion and socioeconomic status (Houghton & Roche, 2001). Self-categorization theory postulates that the more strongly one identifies with a group, the more one will be influenced by the group's norms and the more one will conform to these norms (Turner & Reynolds, 2012), including drinking norms (Neighbors et al., 2010). Most studies connecting social norms and alcohol are based on US-students in which both descriptive and injunctive norms consistently have been found to be strong predictors of students' alcohol use (Borsari & Carey, 2003; Neighbors et al., 2008; O'Connor, Lewis, Chawla, Lee, & Fossos, 2008; Rimal & Real, 2005; Rimal, 2008). Similar results have been reported from Australian samples (Halim, Haskin, & Allen, 2012), and from adult samples in the U.S.A. (Lau-Barraco & Collins, 2011). Descriptive norms tend to correlate stronger than injunctive norms with alcohol (Lewis et al., 2010; Reno, Cialdini, & Kallgren, 1993).

Neighbors et al. (2008) found that both types of norms together with own approval explained almost 40% of the variance in students' alcohol use. The relationship between perception of others approval and one's own drinking depends heavily on how others is defined. Proximal referents (friends and family) seem to consistently give significant associations between injunctive norms and drinking, while more distal referents (typical students) has been less consistent (Neighbors et al., 2008) or non-existent (Halim et al., 2012). Neighbors et al. (2010) reported descriptive norms to be among the best predictors for American college students' drinking. Further, they found that believing that others drank heavier relative to oneself increased one's own drinking. Finally, Neighbors et al. (2010) found that the closer one identified with the reference group, the stronger the association between the perceived drinking norms in that specific group and one's own drinking. It may therefore be important to examine gender specific norms, especially in cultures such as in Malawi with clearly different gender roles.

Adolescents' group size and gender composition influence their alcohol use (Cullum, O'Grady, Armeli, & Tennen, 2012). Larger groups drink heavier, but only when context-specific norms accept alcohol use (Cullum et al., 2012). Men drink more with only men present, while women drink more when both other women and men are present (Borsari & Carey, 2003).

To our knowledge, no large surveys have explored the relationship between drinking and social norms in a sub-Saharan context. In this paper, we will describe alcohol consumption among adults (18+) in Malawi, examine how gender and age moderate drinking, and compare current consumption with 10-year-old WHO-data (Rossow & Clausen, 2013). Second, we will examine whether social drinking norms are promising candidates for prevention programs in Malawi. Finally, self-reported alcohol use will be compared to spouses reports of the others' alcohol use.

METHOD

Sample

A screening questionnaire was administered to 31,676 randomly selected households. This sample was representative of the Malawian adult population and enabled us to determine the proportions of men and women (18 years+) in the general population who had been drinking any alcohol in the 12 months preceding data collection. This survey obtained ethical clearance from research ethics committees in both Malawi and Norway.

Malawi's National Statistical Office (NSO) sampling procedures were followed to obtain representativeness to the whole adult population, without needing to weight the data. NSO based their stratification procedure on systematically selecting enumeration areas (EA) which ensured that the sample of 31,676 households matched the urban (18%) and rural (82%) distribution and the proportions of the adult population, both in the North (13%), Central (43%) and South (45%) regions. The population in all three Malawian regions consisted of 45% adults (18 years+). Before selecting a subsample of households which were administered our large questionnaire from the 31.676 households, all single-adult-households (n = 5,209) and households in which neither the head nor the spouse (n = 23,012)reported any alcohol use last 12 months were excluded. Both heads and spouses in the final subsample of 1,795 households were interviewed separately with two nearly identical standardized questionnaires. These households were systematically selected based on the houses physical location from each of the selected EA. The 10 first households which included both head and spouse, and had at least one alcohol user, in each EA were chosen for the final subsample and administered the long questionnaires. Their mean ages were 41.5 (males) years (SD = 14.5) and 35.5 (females) years (SD = 13.0). Average number of persons in the 26,467 households (excluding single-adult-households) was 4.9, and 5.1 in our 1,795 selected households, which closely resembles the average Malawian household size (including single-headed) of 4.5.

The written questionnaire was administered orally in the respondents' homes and responses written down by 10 Malawian interviewers trained at the University of Malawi. Part of their supervised training consisted in collecting data and discussing procedures over several days during the pilot study. See the summary report (Eide et al., 2013) from the project for further details.

Measurements

Alcohol consumption was measured through seven beverage-specific pairs of frequency and quantity items. The beverage-types were: chibuku; masese; Carlsberg green, stout or special brew; all other types of beer and cider; wine; kachasu; sachets and bottled imported/ industrial spirits. Frequency ("During the last 12 months, how often have you been drinking ... ") was measured on a nine-point scale ranging from "every day or nearly every day" to "never last 12 months". Quantity ("How many standard units/drinks would you have on a typical day the last 12 months when you drink?") was measured on a ten-point scale ranging from "none last 12 months" to "13 or more drinks". Total consumption was controlled through one item asking: "On those days when you had any kind of beverage containing alcohol, how many SU (drinks) did you usually have per day?", with one open ended response-option. Interviewers presented pictures of SU (ca. 12.5 g alcohol) of each beverage type and litres 100% alcohol was calculated ((Sum SU*12.5*0.789)/1000). Spouses were asked one frequency guestion with the same nine-point scale as for self-reports, and one open ended quantity item about number of (12.5 grams) drinks they thought their spouse typically drank. More than half of all self-reported alcohol consumption are from homebrewed alcohol types. Masese and Kachasu are the most important types and these two types amounted to 27.4% and 24.6% respectively of the total reported alcohol consumption. Women's proportions were higher then men's, 39.9 versus 25.6% for Masese and 36.4 versus 22.9% for Kachasu.

Descriptive norms were a sumscore of four items. Two items asked how many of the men and two about how many of the women they knew at about their own age who they believed 1) drank some alcohol at least once a week and 2) got drunk at least once a month. Four response options were used: All or most of them, 90-100%; more than half of them, 50-89%; less than half of them, 10-49%; none or almost none, 0-9%. Men's mean score and standard deviation (*SD*) were 8.75 (2.54) while women's were 8.63 (2.60). Cronbach's alphas were .77 for both genders.

Same-sex descriptive norms were the sum of two of the four abovementioned items for men and the two others for women. Men's mean score (SD) was 5.59 (1.57), Cronbach's alpha was .79. Women's mean score (SD) was 3.17 (1.51), Cronbach's alpha was .90. The difference in mean scores reflects that men describe perception of other men's alcohol use, while women describe perception of other women's drinking. The opposite pattern appeared for the next sum-score.

Opposite-sex descriptive norms were sums of the other two descriptive normitems. Men's mean score (*SD*) was 3.15 (1.51), Cronbach's alpha was .91. Women's mean score (*SD*) was 5.46 (1.66), Cronbach's alpha was .82.

Injunctive norms was sumscore of eight items asking how much alcohol most people who were close and important for you thought was OK for you to drink in different situations (At a party, at someone else's home; As a mother/father spending time with small children; As a couple of co-workers out for lunch; As a wife/husband having dinner out with his/her wife/ husband; As a woman/man out at a bar with friends: When with friends at home: When getting together with friends after work before going home; With friends in the street). Four response-options were given: No drinking (1); 1-2 drinks (2); up to 5 drinks was all right (3); more than 5 drinks was sometimes all right (4). Men's mean score (SD) was 11.23 (4.06), Cronbach's alpha was .85. Women's mean score (SD) was 8.76 (2.19), Cronbach's alpha was .89.

RESULTS

From the 31,676 households surveyed, 14.5% of all 63,352 adults, 27.3% (n = 8,662) of the males and 1.6% (n = 505) of the females had drunk any alcohol in the last 12 months. The figures included single adult-households and were representative of the Malawian 18+ year-old population.

Male alcohol users' mean consumption was 8.05 litres, while female alcohol users' mean consumption was 1.51 litres last 12 months (Table 1). Only those who reported any alcohol use last 12 months were included when means of alcohol consumption were estimated. There was no significant difference in consumption levels between neither the males' nor the females' age-groups. Average consumption per year for the whole Malawian adult population was obtained by multiplying males' consumption by 0.273 and females' by 0.016, resulting in 2.20 and 0.02 litres 100% alcohol for males and

		Men		Women
Age-groups	Ν	Litres 100% alcohol (SD)	Ν	Litres 100% alcohol (SD)
18-24	124	5.9 (11.7)	10	1.1 (1.9)
25-29	265	9.5 (14.5)	12	0.5 (1.2)
30-34	298	8.2 (11.8)	16	0.8 (1.1)
35-39	283	9.1 (15.7)	20	1.2 (2.0)
40-44	210	7.5 (10.8)	16	1.1 (1.5)
45-49	157	7.5 (11.4)	14	1.8 (1.7)
50-54	109	9.1 (11.3)	14	2.9 (4.1)
55-64	180	7.2 (10.6)	34	2.0 (3.3)
65-92	150	6.8 (10.9)	20	1.6 (2.3)
Total	1776	8.05 (12.59)	156	1.51 (2.49)

Table 1.Litres 100% alcohol consumption last 12 months by gender and age-groups,standard deviations in parentheses (Only alcohol users are included)

females respectively. All alcohol users' mean yearly consumption in our study was calculated in the following manner; [(1776 men * 8.05 litres) + (156 women * 1.51 litres)] / 1932) = 7.52. Compared to the 10-year old Malawian WHO data, mean consumption dropped from 8.44 to 7.52 litres.

Spouses' reported quantities for males (self-reported alcohol users) were 12.46 litres 100% alcohol and it was 2.73 litres for the females (also only the selfreported alcohol users). To obtain comparable numbers, only self-reports from households without missing responses on spouses' reported alcohol use were included, which included 1680 men (self-reported average was still 8.05 litre) and 112 females (removing the 44 women increased mean from 1.51 to 1.70 litre). Pearson *r* for spouses' reports about their consumption and men's self-reports were .25 (p < 0.001) and .56 (p < 0.001) for females' self-reported consumption.

Table 2 presents how closely related each of the social norms was to alcohol consumption, and whether gender interacted in these relationships. The two correlations between men's alcohol consumption and their injunctive and

Table 2.	Pearson i	between	alcohol	consumption	(log),	injunctive	and	descriptive
norms by	gender							

Variables	Men (n = 1776) Alcohol consumption	Women (n = 156) Alcohol consumption
Injunctive norms	.21***	.22**
Descriptive norms	.18***	.30***
Descriptive norms same-sex	.17***	.43***
Descriptive norms opposite-sex	.13***	.08

** = p < .01; *** = p < .001

descriptive norms were quite low and very similar (r = 0.21 and 0.18). Splitting males' descriptive norms into same- and opposite-sex norms, only gave the same or lower correlations (0.17 and .13). Female's injunctive norms (r = 0.22) correlated almost like men's, while their descriptive norms correlated higher (r =0.30). The difference were, however, not statistically significant (between 0.30 and 0.18, z = 1.51, p = 0.13). With as many women as men in the analyses. the differences would have been highly significant (z-value of 3.81). However, when splitting the descriptive norms into same- and opposite-sex norms, same-sex norms correlated much higher (r = .43) with alcohol consumption, and significantly higher than men's correlations of .17 (z = 3.42, p < 0.001).

Multiple linear regressions were preliminary done without splitting descriptive norms into same- and opposite-sex norms. More of women's variances in alcohol consumption were explained by their norms than men's; 10.6% versus 6.5%. Descriptive norms were more important than injunctive norms for women's total consumption (betas of .25 and .14) while the opposite pattern emerged for men (betas of .14 and .18). These preliminary results showed that women were more influenced by how they perceived others' use of alcohol than by how they believed others wanted the respondents to drink/not drink. The tendency was opposite for the men, although their norms were weaker related to the drinking measure than females. These gender differences are shown in Table 3 by separating the perceived descriptive norms by gender as the correlations in Table 2 show significant gender-differences.

Women's alcohol consumption was much better predicted by their norms than men's (Table 3), and the difference was much clearer after splitting descriptive norms into same- and opposite-sex norms compared to the preliminary regression analyses above. Especially noteworthy was the increase from 10.6% till 20.9% explained variance in women's alcohol consumption, while men's explained variances hardly changed after the split.

Finally, the two regression-analyses presented in Table 3 were also performed as hierarchical multiple linear regressions with the nine age-groups presented in Table 1 multiplied with the three independent predictors used in Table 3 and entered after the main effects to examine possible interactions. No significant interactions emerged which led to the

	Men (n = 1776)	Women (n = 156) Alcohol consumption	
Variables	Alcohol consumption		
	Beta	Beta	
Same-sex descriptive norms	.13***	.47***	
Opposite-sex descriptive norms	.05	16	
Injunctive norms	.19***	.10	
R ² =	.067***	.209***	

Table 3. Multiple linear regressions for each gender explaining variance in yearly alcohol consumption (log) by injunctive norms and sex-specific descriptive norms

*** = *p* < .001

conclusion that age did not act as a moderator on the relationships found when yearly alcohol consumption was predicted by injunctive norms, same- and opposite-sex descriptive norms.

DISCUSSION

To our knowledge, this is the most comprehensive study of alcohol use ever conducted in Malawi. The most striking results were that so few as 1.6% of the women and 27.3% of the men reported to have used alcohol in the last 12 months. Both proportions are in line with the other sub-Saharan countries (Rossow & Clausen, 2013), but low compared to European and North American levels. The big gender difference in proportions of alcohol users is also reflected in the quantum reported, 1.51 litres 100% alcohol per year for female alcohol users and 8.05 litres for male alcohol users.

In spite of possible differences in estimation of alcohol consumption between the current study and the earlier WHOestimates (Rossow & Clausen, 2013), a reduction in alcohol consumption among those who drink alcohol over the last 10 years is indicated, from 8.44 to 7.52 litres 100% alcohol per year. Total alcohol consumption did not vary significantly with age. Norms were significantly, but not strongly related to alcohol consumption, and clearly stronger for female compared to male alcohol users.

Among alcohol users, Malawian men's quantum was comparable to many European countries, while women drink far less than their European sisters. When estimating the average quantum for all adult Malawians, men's average went down to 2.20 litres, while women's average approached zero; 0.02 litres. This represents just above one litre per capita 18+ years, and the consumption would have been even lower if 15+ years had been used as in Obot's (2006) paper.

Compared to other studies of alcohol use in Malawi and other African countries (Clausen et al., 2009), men's consumption was somewhat lower, while female's consumption was much lower than anticipated. However, the low proportion of female alcohol users was comparable to the study by Martinez et al. (2011).

When spouses estimated their spouses' alcohol consumption, men's level was increased by 55% and women's consumption level increased by 61%. We did not try to correct the self-reports, partly because the consumption levels would become less comparable to almost all other surveys as these use self-reports without any such corrections, and partly because we cannot know whether spouses estimates were more accurate than the selfreports. Neither did the rather low correlations support any individual corrections, although correlations would have been higher if non-drinkers had been included in the analyses. However, Midanik (1982) have compared self-reports to sales-statistics and found 40-60% underreported consumption.

Compared to most European and North-American surveys showing that alcohol consumption reaches its peak in the early twenties, it was somewhat surprising that the youngest group in Malawi (18-24 years) consumed less than Malawians in their fifties. It may very well be social norms that guide such differences. This interpretation can be supported by Zverev's (2008) study in which much higher proportions of university students reported alcohol use and episodes of binge-drinking than the Malawian general population.

Injunctive- and descriptive norms were significantly, but rather weakly related to men's alcohol use. It is of course no reason to avoid including norms in an intervention effort directed at men's alcohol use, but one should not focus only on norms as the results here indicate that less than seven percent of men's alcohol use could be reduced as a maximum (see Hansen & McNeal, 1996). As we have used questionnaires developed for use in Europe, we might have measured norms in a suboptimal manner and missed out on some social norms important for Malawians. However, women's alcohol consumption was much stronger related to their norms, and most strongly to their perception of other women's alcohol use. Therefore, norms might be a promising pathway for further exploration for planners of prevention efforts. Still, as so few women reported drinking; intervention efforts would probably be most effective by supporting the abstainers' norms for not drinking, not by trying to alter the drinkers' norms in an attempt to reduce their drinking. There is of course no contradiction in pursuing both goals.

Since age did not moderate the relationship between alcohol use and norms, this study does not support age-differentiated prevention efforts when targeting drinking norms.

The strong research design helped us obtain a representative sample of all adults in Malawi, while thorough training of the interviewers, and well organized data-collection have helped us obtaining data of high quality. Still, differences between interviewers, the lengthy data collection and limitations inherent in the survey-method may have influenced the results as in all such surveys. However, this study was implemented very meticulously in order to reduce such problems to a minimum. The use of internationally acknowledged research instruments and procedures for estimating alcohol consumption optimally (Gmel, Graham, Kuendig, & Kuntsche, 2006) further supports the validity and reliability of the results.

This study has provided Malawi with much needed data on male and female alcohol consumption. The results may be useful for policy development, formulation of targets and planning of intervention efforts. Malawi now have a solid basis for monitoring development of alcohol use and monitoring effects of policies and measures in order to keep the proportion of abstainers high and to reduce problem drinking.

Acknowledgements: The study was funded by the Norwegian Research Council (NORGLOBAL). Declaration of interest: None

REFERENCES

- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. New Jersey: Prentice-Hall.
- Borsari, B., & Carey, K. B. (2003). Descriptive and injunctive norms in college drinking: A meta-analytic integration. *Journal of Studies on Alcohol and Drugs, 64*, 331-341.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. Journal of *Personality and Social Psychology, 58*, 1015-1026.

- Clausen, T., Rossow, I., Naidoo, N., & Kowal, P. (2009). Diverse alcohol drinking patterns in 20 African countries. *Addiction, 104*, 1147-1154.
- Cullum, J., O'Grady, M., Armeli, S., & Tennen, H. (2012). The role of context-specific norms and group size in alcohol consumption and compliance drinking during natural drinking events. *Basic and Applied Social Psychology, 35*, 304-312.
- Gmel, G., Graham, K., Kuendig, H., & Kuntsche, S. (2006). Measuring alcohol consumption – should the 'graduated frequency' approach become the norm in survey research? *Addiction, 101,* 16-30.
- Eide, A. H., Braathen, S. H., Azalde, G., Munthali, A. Chiocha, M., Ndawala, J., ... Hoel, E. (2013). *Fighting poverty through alcohol misuse prevention in Malawi – revised summary report* (Dec. 2013), SINTEF report A25509, ISBN 978-82-14-05624-2, Oslo: SINTEF.
- Eidhammer, A. (2005). *Malawi: eit lite land i Afrika* [Malawi: a small country in Africa]. Høvik, Norway: Kolofon
- Halim, A., Hasking, P., & Allen, F. (2012). The role of social drinking motives in the relationship between social norms and alcohol consumption. *Addictive Behaviors*, *37*, 1335-1341.
- Hansen, W. B., & McNeal, R. B. (1996). The law of maximum expected potential effect: constraints placed on program effectiveness by mediator relationships. *Health Education Research; Theory and Practice, 11*, 501-507.
- Hogg, M. A., & Vaughan, G. M. (2011). Social psychology (6. ed.). London: Pearson.
- Houghton, E., & Roche, A. M. (2001). *Learning about drinking*. Philadelphia: Brunner-Routledge.

- Kabiru, C. W., Beguy, D., Crichton, J., & Ezeh, A. (2010). Self-reported drunkenness among adolescents in four sub-Saharan African countries: associations with adverse childhood experiences. *Child and Adolescent Psychiatry and Mental Health, 4*(17), 1-13.
- Lau-Barraco, C., & Collins, R. L. (2011). Social networks and alcohol use among nonstudent emerging adults: A preliminary study. *Addictive Behaviors*, *36*, 47-54.
- Lewis, M. A., Neighbors, C., Geisner, I. M., Lee, C. M., Kilmer, J. R., & Atkins, D. C. (2010). Examining the associations among severity of injunctive drinking norms, alcohol consumption, and alcohol-related negative consequences: The moderating roles of alcohol consumption and identity. *Psychology* of Addictive Behaviors, 24, 177-189.
- Martinez, P., Røislien, J., Naidoo, N., & Clausen, T. (2011). Alcohol abstinence and drinking among African women: data from the World Health Surveys. *BMC Public Health*, 11(1), 1-11.
- Midanik, L. (1982). The validity of self-reported alcohol consumption and alcohol problems: a litreature review. *British journal of Addiction, 77*, 357-382.
- Neighbors, C., LaBrie, J. W., Hummer, J. F., Lewis, M. A., Lee, C. M., Desai, S., . . . Larimer, M. E. (2010). Group identification as a moderator of the relationship between perceived social norms and alcohol consumption. *Psychology of Addictive Behaviors, 24*, 522-528.
- Neighbors, C., O'Connor, R. M., Lewis, M. A., Chawla, N., Lee, M. C., & Fossos, N. (2008). The relative impact of injunctive norms on college student drinking: The role of reference group. *Psychology of Addictive Behaviors*, 22, 576-581.

- Obot, I. S. (2006). Alcohol use and related problems in sub-Saharan Africa. *African Journal of Drug and Alcohol Studies*, 5(1), 17-26.
- Reno, R. R., Cialdini, R. B., & Kallgren, C. A. (1993). The transsituational influence of social norms. *Journal of Personality and Social Psychology, 64*, 104-112.
- Rimal, R. N. (2008). Modeling the relationship between descriptive norms and behaviors: A test and extension of the theory of normative social behavior. Health Communication, 23, 103-116.
- Rimal, R. N., & Real, K. (2005). How behaviors are influenced by perceived norms: A test of the normative social behavior. *Communication Research*, *32*, 389-414.
- Rossow, I., & Clausen, T. (2013). The collectivity of drinking cultures: is the theory applicable to African settings? *Addiction, 108,* 1612-1617.

- Turner, J. C., & Reynolds, K. J. (2012). Selfcategorization theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.) Handbook of theories of social psychology. London: Sage.
- World Health Organization [WHO]. (2012). Malawi. Retrieved Oct. 4th, 2013 from http://www.who.int/countries/mwi/en/
- World Health Organization [WHO]. (2014). Global status report on alcohol and health. Retrieved May 28th from http://www.who.int/substance_abuse/publications/global_ alcohol_report/en/
- Zverev, Y. (2008). Problem drinking among university students in Malawi. *Collegium Antropologicum*, *32*(1), 27-31.

Avalon de Bruijn¹, Carina Ferreira-Borges², Rutger Engels³, Megha Bhavsar⁴

¹European Centre for Monitoring Alcohol Marketing (EUCAM); Dutch Institute for Alcohol Policy; Radboud University Nijmegen; ²Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa; ³Developmental Psychopathology, Radboud, University Nijmegen; Trimbos Institute; ⁴Dutch Institute for Alcohol Policy

ABSTRACT

This paper aims to describe alcohol advertising in the public arena of Gambia, Ghana, Madagascar, Nigeria and Uganda. Analyses on the placement, channels, size and content of outdoor alcohol advertising practices (N=807) in relation to existing regulations are given. For example, in Gambia, the country with the most stringent alcohol marketing regulations of all countries studied, outdoor alcohol advertisements are on average smaller and less attractive to youth; whereas, in Uganda and Ghana, countries with self-regulation, there is limited protection. Findings illustrate the innovative ways in which the alcohol industry attempts to reach their market despite existing alcohol marketing regulations and cultural boundaries. Legal measures could be a policy instrument to protect against harmful exposure.

Key Words: alcohol marketing, outdoor advertising, Africa, alcohol policy

INTRODUCTION

All continents are potentially a target of meticulously planned marketing strategies by giant alcohol companies such as SABMiller, Heineken, Diageo, Carlsberg and Anheuser-Busch Inbev which promote their products globally. Due to the saturated market in most Western countries (World Health Organization, 2011), emerging markets and developing countries have been targeted recently by global alcohol corporations (Casswell & Thamarangsi, 2009).

Changes in social and cultural conditions along with increased marketing efforts, are expected to raise alcohol consumption and consequently to increase alcohol-related harm worldwide (Casswell & Thamarangsi, 2009). Developing

Corresponding author: Avalon de Bruijn; European Centre for Monitoring Alcohol Marketing (EUCAM); Email: eucam@eucam.info; Postal address: Leliestraat 6, 3742 RM Baarn, the Netherlands; Telephone: +31(0)6 44381143

countries are affected disproportionately by a large burden of alcohol-related problems (Rehm et al., 2009). As European data show, costs for health care can amount to billions of dollars (Baumberg & Anderson, 2008). Furthermore, many problems will be created in private domains (home and work), such as violence, unemployment and absenteeism, as well as the public domain.

Research shows the potential influence of exposure to alcohol marketing on young people's drinking in Western countries (Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009). It is expected that in developing countries, alcohol advertising and promotion has a far stronger impact on the level of consumption than in Western countries. Jernigan (Jernigan, Obot, & Jos, 2006) warns of more sophisticated and ubiquitous marketing strategies than those allowed in developed nations which (is and) will be used to target African youth: Alcohol is portrayed as an emblem of success, and a symbol of heroism, courage and virility. New generations of drinkers are the target group of marketers by advertising in TV commercials, billboards, newspapers, magazines, internet and (event) sponsoring (Jernigan, 2008; Jernigan et al., 2006).

Outdoor alcohol advertising is a marketing strategy that, quite literally, has the potential to influence the commercial alcohol landscape of young people (B. Kelly, Cretikos, Rogers, & King, 2008). It covers all alcohol promotions in the public arena, e.g.: billboards, posters, flags, but also tables and chairs on terraces. Exposure to outdoor alcohol advertising has been associated with subsequent young people's intention to drink (Kwate & Meyer, 2009; Pasch, Komro, Perry, Hearst, & Farbakhsh, 2007). The volume, place, size and attractiveness of the advertisements are expected to have an influence on its audience. A US study concluded that outdoor advertising near schools (within a radius of 1500 feet (547 meter)) is particularly risky due to repetitive daily exposure of young people (Pasch et al., 2007). In most developing countries, young people have to travel farther distances to visit schools and so, alcohol advertisements can be assumed to have a larger radius of reach. Also, larger outdoor advertisements can be seen from a farther distance and can therefore reach a larger audience.

A study by Chen et al (Chen, Grube, Bersamin, Waiters, & Keefe, 2005) suggests that exposure to alcohol advertisements containing elements that are considered to be appealing by youth increases the intention to purchase alcoholic products. Image advertisements are considered to be more attractive than advertisements with a basic description of the product and their appeal is associated with young people's intention to use alcohol (K. J. Kelly & Edwards, 1998). More specifically, young people find alcohol advertising with elements such as celebrity endorsers, humor, animation, popular music and depicting sports are particularly appealing (Chen et al., 2005; Grube & Waiters, 2005; Martin et al., 2002).

Since alcohol industry activities are rising throughout the African continent there is a need to collect data on the volume and content of alcohol advertising systematically in different media in the region. It is expected that alcohol branded outdoor advertising can influence the acceptance of alcohol in societies in which the commercial market of alcohol is emerging. In order to get an impression of the alcohol industry's activities in developing countries, examining characteristics of alcohol branded outdoor advertising can be a useful first step. This paper aims to describe the results of monitoring alcohol branded advertising in the public arena of five Sub-Saharan African countries: the Gambia, Ghana, Madagascar, Nigeria and Uganda. It provides a description and statistical analysis on the placement, volume and content of alcohol marketing practices in these countries and correlations with existing alcohol marketing regulations in the countries studied.

The MAMPA project

In 2010, the African Regional Office of the World Health Organization commissioned the -Monitoring Alcohol Marketing Practices in Africa (MAMPA) project (A. De Bruijn, 2011) in which a method was pre-tested that systematically monitored alcohol marketing practices in the Gambia, Ghana, Nigeria and Uganda. The findings have been reported in a WHO report (De Bruijn, 2011). In October 2013, a similar monitoring exercise was undertaken in Madagascar (De Bruijn & Van der Waal, 2013). This paper utilizes data collected in both projects.

Reflecting religious, cultural, political and economic variety between countries, the sampled countries differ in alcohol consumption rates (WorldHealthOrganization, 2011), acceptance of alcohol use and existing regulations covering alcohol marketing.

For example, reflecting the public reluctance towards alcohol in the Gambia, alcohol marketing is strictly regulated in the Gambia. Alcohol is not allowed to be advertised on national television and radio (World Health Organization, 2011). Advertising spirits through sport sponsorship is not allowed by law(World Health Organization, 2011). In channels in which alcohol advertisements are permitted, there is a mandatory health warning message in place(World Health Organization, 2011). Although alcohol branded outdoor advertising is permitted, it is hypothesized to be less prevalent in terms of size and attractiveness to youth than in the other African countries monitored due to its reluctance of the general public towards alcohol use and advertising.

Global alcohol producing countries are already very active on the Ghanaian and Ugandan market (De Bruijn, 2011). Both Ghana und Uganda rely fully on self-regulation by the alcohol industry. The voluntary codes do not restrict the volume of (outdoor) alcohol advertising and there is a lot of freedom regarding the content of alcohol advertising. A few weeks before the start of the data collection, a new tax on billboards in the district of Kampala had been introduced. This new law might influence the use of billboards as a marketing tool in Uganda (De Bruijn, 2011). It is, however, unclear whether the law was actually already in place during the time of the data collection. Due to the absence of national legal restrictions of alcohol marketing, it is hypothesized that characteristics of outdoor alcohol advertising in Uganda show many similarities with those in Ghana.

By monitoring other marketing channels in these countries we have seen that alcohol is marketed as a product that plays a central role in the life of every Ghanaian and Ugandan: It is part of every party and celebration and it is easily available and affordable to everyone(De Bruijn, 2011). We expect a similar picture regarding outdoor advertising of the product. It is hypothesized that the content and placement of outdoor alcohol advertising is very visible and attractive to youth and does not differ much among countries that rely solely on self-regulation of alcohol marketing.

Madagascar has a base of legislative restrictions on alcohol advertising in the 'Code General de Impots' (Art. 10/06/37-39 & Art. 10/06/73-75). Art 10/06/74 prohibits lifestyle marketing or any associations that go beyond product information. Madagascar has some regulation that restricts point of sale of alcohol within 150 metre radius of any public institution including religious buildings, hospitals and schools; nor can a point of sale be placed around another existing flow. However, the articles do not prohibit advertising near schools (i.e. within 150 metres). It is hypothesized that alcohol advertisements are visible to youth, although there will be few attractive elements given the legislative base.

The Nigerian government does not strictly regulate the advertising industry, but a government agency (APCON) is enacted to oversee the activities of the industry. No outdoor alcohol advertising is allowed near schools, hospitals, sports arenas and places of worship (De Bruijn & Van der Waal, 2013). The alcohol advertising regulations could only be attained from within Nigeria and no direct copy of the text was found. This regulation, along with a general tax on all kinds of billboards that is in place, is expected to influence the use of billboards as a marketing instrument by alcohol marketers in Nigeria. It is hypothesized that outdoor alcohol advertisements have been placed further away from schools in Nigeria compared to countries without such legal restriction. Moreover, it is hypothesized that alcohol advertisers prefer to use alternatives to billboards due to the tax paid on this marketing channel.

METHOD

Sample

The study includes a routine-data-based study carried out at the individual level in which alcohol marketing practices are the study subjects of interest. An impression of the volume of alcohol marketing in the public arena is made by recording the place, volume and content of outdoor alcohol advertisements in the public arena. A broad definition of outdoor advertising is used, which includes billboards, posters, flags, signs, promotional items, logos of alcohol brands on stacked beer crates. etc (Kwate & Lee, 2007). Variation exists between monitored areas due to limitations of existing maps. In Uganda and Ghana areas of 0.25 km² of a city centre, a suburban area and a village were identified on a map. In Madagascar, five areas of 0.25m² were monitored, including four urban areas and one suburban area. In the Gambia and Nigeria, a radius of 500 metres was identified in similar areas.

Under the supervision of the Dutch Institute for Alcohol Policy and the European Centre for Monitoring Alcohol Marketing (EUCAM), two teams of researchers scanned the area and photographed each alcohol branded outdoor advertisement encountered. Teams consisted of representatives of national NGOs or research institutes knowledgeable in the alcohol and alcohol marketing field. To identify the spatial location of outdoor alcohol advertisements, the placement of the advertisement was estimated and identified on a map. A similar approach was taken to estimate the placement of primary and secondary schools in and around the identified areas. This paper limits its scope to schools since they are visited by a large majority of minors and are easily identified as such. The number of alcohol advertising practices encountered in the public domain (on the street) within the defined areas was reported, together with the placement and content of the advertisements of all marketing Since areas monitored were not identical in size no meaningful comparison of alcohol advertisement density (B. Kelly et al., 2008; Kwate & Lee, 2007) between the identified areas could not be made.

Data from Madagascar was collected in 2013. Data from all other countries was collected in 2010.

In total, 807 outdoor promotions were encountered and recorded by the research teams. An overview of all photos taken and maps of areas monitored has been included as an annex of the MAMPA report (De Bruijn, 2011).

Variables and analyses:

Marketing channels

A broad definition of outdoor alcohol advertising is used which include all types of alcohol promotion encountered in the public arena (that can be seen from the streets). The following marketing channels have been identified: 1 product display (including beer crates, alcohol bottles and 'mugs'); 2 posters; 3 flags or signs; 4 paintings on buildings/walls/fences; 5 billboards; 6 promotional items (including alcohol branded tables, umbrellas, etc). Examples of marketing channels are provided online (De Bruijn, Ferreira-Borges, Engels, & Bhavsar, 2014).

Size

Previous studies that identify the size of outdoor advertisements typically do not identify very large billboards or wall paintings as a separate category (B. Kelly et al., 2008). To modify the categories according to local peculiarities, we have distinguished the size of outdoor alcohol advertising in the following categories: 1 (< 0.006m² including beer crates); 2 (0.006m²-0.012m² including small posters); 3 (0.012m²-0.064m² including medium size posters); 4 (0.064m²-1,44m² including large posters and small billboards); 5 (>1.44m² including large bill boards and large wall paintings).

School distance

The frequently used benchmarks of 500 and 1000 feet (e.g. (Hackbarth et al., 2001; Kwate, Jernigan, & Lee, 2007; Pasch et al., 2007)) is taken in the current study as cutting points to estimate the distance between alcohol advertisements and schools. An approximation of the distance is estimated on a map and categorized as 1 (<500 feet from schools); 2 (500-1000 feet); 3 (>1000 feet).

Data from Madagascar was collected in 2013. Data from all other countries was collected in 2010. Alcohol marketing regulations have not been changed since the data collection and time of writing. A Kruskal Wallis test is used to determine the strength of the alcohol marketing regulation at the time of data collected and the distance between alcohol ads and schools. Communication with stakeholders and a search through the literature informed us about existing regulations in the countries sampled. Both Nigeria and Madagascar have some regulation, however, it is not possible to compare the strength of regulation in the two countries. Therefore, two sets of comparisons were made: one between the Gambia (strict regulation), Madagascar (regulation) and Ghana and Uganda (self-regulation), and the other between The Gambia (strict regulation), Nigeria (regulation) and Ghana and Uganda (self-regulation).

Attractive elements

The identification of thematic content of the outdoor advertisements was based on the list of themes constructed by Pinsky and Silva (Pinsky & Silva, 1999) that measured appealing elements in alcohol advertisements. The list was slightly modified according to local peculiarities identifying the following themes: social theme (including friendship, social success), sport theme (including physical activity), economic theme (including economic success), sexual connotations, music, national symbolism and tradition, social responsibility ('better world'), fun and humor, and masculinity. Advertisements were judged conservatively on presences of attractive elements. Each advertisement was coded by two raters on the presence of these themes. When there was a difference in coding between raters, consensus was sought. The use of these different attractive elements was summed (range from 0 to 6).

Image

All outdoor advertisements were coded on whether the advertisement contained images or no use of images (i.e. containing images other than solely product information) which resulted in a dichotomous variable (0: No use of an image; 1: image-advertising). Advertisements were judged conservatively on whether they contained images or not. Examples of advertisements are provided online (De Bruijn et al., 2014)

Analysis

A description of outdoor alcohol advertising in each country is given and an

overview of the use of marketing channels is provided by the use of a cross table. SPSS 17.0 was used for analysis. To analyze differences in preference of these channels in the countries sampled, multinomial logistic regression analyses have been performed of which the main results are described. Ordered logistic regression analyses have been performed to analyze differences in sizes, and school distance predicted by country or regulation. Linear regression analyses have been performed between country and number of attractive elements, and a binary logistic regression analysis has been performed to study whether alcohol advertisements contain images other than product information. To summarize results, a graph has been drafted in which the mean of all dependent variables by country has been drawn. For sake of clarity, all dependent variables have been rescaled to a range of 0 to 1 to put them in one graph.

RESULTS

Different marketing channels

Table 1 shows the distribution of marketing channels of outdoor alcohol advertisements by country. In the Gambia, 94.3% of the country's outdoor advertising consisted of product display and 2.9% consisted of billboards. In Nigeria, 28.3% of the country's outdoor advertising consisted of product display and 3.0% consisted of billboards. In these countries there is strict regulation (the Gambia) or a tax law on billboards (Nigeria). In Uganda, where there is only self-regulation, 22.3% of its outdoor advertising was through billboards. This was similar to the situation in Ghana. Outdoor advertising in Madagascar used relatively low levels of billboards. In the Gambia, no posters for alcohol were found. However, in all other countries studied, posters were frequently used. Flags or signs were frequently found in Madagascar but not in the Gambia. In Ghana, painting on walls/buildings/fences were identified frequently (18.3% of advertisements) for outdoor advertising. Promotional items were encountered in all countries except the Gambia. A statistical test to compare distribution of the preferences of the marketing channels between the five countries was conducted and can be found online (De Bruijn et al., 2014).

Size of the advertisements:

The size of the alcohol advertisements is connected to the marketing channel used. In separate analyses, each country was used as a predictor variable to compare the size of the advertisements (dependent variable). Figure 1 outlines the hierarchy of the size of the advertisements and the statistical significance. In line with the hypothesis formulated, the ordered logistic regression analysis suggests that alcohol ads found in Ghana are larger than those found in Nigeria (B=2.669***, W=6.300) but do not differ in size from ads found in Uganda or Madagascar (p>.05). Ads in Madagascar are smaller than Uganda (B=6.03***, W=6.713). Ads in Nigeria are larger than those in Gambia B=4.360***; W=18.675) but smaller than those in Uganda (B=-2.900***; Ghana (B=-2.669***; W=116.219), W=6.300) and Madagascar (B=-2.296***; W=114.747). Outdoor alcohol advertisements in Gambia are smaller than in the other four countries (p<.001).

Placement of ads near schools:

A Kruskal Wallis test shows a positive correlation between the strength of the alcohol marketing regulation and the distance of alcohol ads placed from schools. Both Nigeria and Madagascar had varying degrees of regulation, and so, it was not possible to distinguish the level of regulation between the two. Therefore,

Country	Product display	Poster	Flag/sign	Wall/fence painting	Billboard	Promotional item	Total
Gambia	33	0	0	1	1	0	35
	94.3%	0.0%	0.0%	2.9%	2.9%	0.0%	100%
Ghana	8	21	3	11	16	1	60
	13.3%	35.0%	5.0%	18.3%	26.7%	1.7%	100%
Nigeria	103	182	38	11	11	19	364
	28.3%	50.0%	10.4%	3.0%	3.0%	5.2%	100%
Uganda	1	61	10	6	25	9	112
	0.9%	54.5%	8.9%	5.4%	22.3%	8.0%	100%
Madagascar	3	93	67	11	17	29	220
	1.4%	42.3%	30.5%	5.0%	7.7%	13.2%	100%
Total	148	357	118	40	70	58	791
	18.7%	45.1%	14.9%	5.1%	8.8%	7.3%	100%

Table 1. Distribution of marketing channels of outdoor alcohol advertisement by country

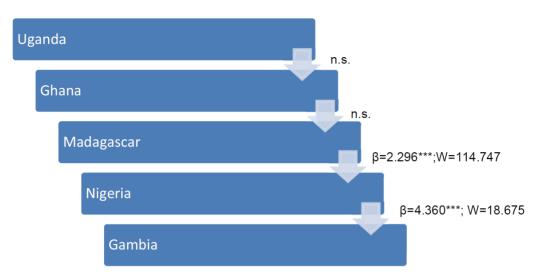


Figure 1. Hierarchy of size of advertisements and statistical significance Notes: β = standardized beta; W=Wald Statistic; ***p<.001; n.s. p>.05

two sets of analyses were conducted either excluding Nigeria (Chi-Sq (df 2) =75.756 p<0.001), or excluding Madagascar (Chi-Sq (df 2) =49.717 with p<0.001). Overall, results suggest the more stringent the alcohol marketing regulation in a country, the further alcohol ads are placed away from schools. However, when distinguishing the different countries, we can see that the relationship is a more complex one. An ordered logistic regression analysis of school distance by country shows that there is no difference between the placement of alcohol ads in Nigeria and Ghana near schools (p>0.05). In line with the expectations, alcohol ads in the Gambia are placed further away from schools compared to those in Uganda. However, they are not placed further away than those found in Ghana (p>0.05). Ads in Nigeria are more likely to be placed further from school than Madagascar.

The following relationships were found:

In Nigeria (B=-2.979, Wald=223.945, p< 0.001), Ghana (B=-2.700, Wald=73.482,

p<0.001), Uganda (B=-1.056, Wald=21.272, p<0.001) and Gambia (B=-1.879, Wald=28.054, p<0.001), ads are more likely to be placed further from school than Madagascar. Surprisingly, in Ghana, ads were placed further from school than in Gambia and Uganda.

- In Ghana (B=-1.644, W=25.557, p<0.001), Gambia (B=-0.822, W=5.090, p<0.024) and Nigeria (B=-1.922, W=80.331, p<0.001), ads are more likely to be further from school compared to Uganda; In Madagascar, ads are less likely to be further from school (B=1.071 W=21.865, p<0.001) compared to Uganda.
- (B=-1.100, Nigeria -In W=10.323, p<0.001) ads are more likely to be placed further away from schools than Gambia. Madagascar (B=1.879, p<0.001) and W=28.054, Uganda are more likely (B=0.822, W=5.090 p=0.024) to have ads placed closer to school when compared to Gambia. There was no difference between Ghana and Gambia between ads and the distance to school (p>0.05).

- In Madagascar (B=2.700, W=73.482, p<0.000), and Uganda (B=1.644, W=25.557, p<0.001) ads are more likely to be placed closer to school compared to Ghana, with Madagascar being closest to schools and Uganda being furthest relative to Ghana.
- In Madagascar (B=2.979, W=223.945, p<0.001), Uganda (B=1.922, W=80.331, p<0.001) and Gambia (B=1.100, W=10.323, p<0.001) ads are more likely to be placed closer to school compared to Nigeria. There was no difference between Ghana and Nigeria between ads and the distance to school (p>0.05).

Image advertising:

In line with the hypothesis formulated, the binary logistic regression analyses performed show that outdoor advertisements in the Gambia and Madagascar have significantly less chance to contain images other than product information (Table 2). For example, the odds that alcohol ads contain images in Uganda is 87.6 times greater than in the Gambia. In Ghana, the odds that alcohol ads contain images is 53.8 times greater than in the Gambia. In Nigeria, the odds that alcohol ads contain images other than product information is 40.2 times greater than in the Gambia. When comparing alcohol ads in Madagascar to Gambia, there was no significant difference. The likelihood of using images in ads in Uganda is 2.2 times greater than in Nigeria. When comparing alcohol ads in Ghana to Nigeria, there was no significant difference. Compared to Madagascar, the likelihood of using images in ads is 11.9 times greater in Ghana, 8.9 times greater in Nigeria and 19.3 times greater in Uganda. When comparing alcohol ads in Madagascar to Gambia, there was no significant difference.

Attractive elements:

Among the alcohol ads in each country, the most attractive element varied. In Ghana, 21.7% of ads contain social attractiveness elements. In Madagascar, 3.6% of the ads contain social attractiveness elements, which is more than any other

Level of Regulation	Country	Uganda (U)	Ghana (Gh)	Madagascar (M)	Nigeria (N)	Gambia (Ga)
100% self- regulation	Uganda		n.s.	O.R.=19.3 [10.885, 34.284] <i>P</i> =0.951	O.R.=2.2 [1.388, 3.420] <i>P</i> =0.686	O.R.=87.6 [11.516, 666,012] <i>P</i> =0.989
	Ghana	Wald=2.152 <i>p</i> >0.05		O.R.=11.9 [6.170, 22.854] <i>P</i> =0.922	n.s.	O.R.=53.8 [6.908, 419.409] <i>P</i> =0.982
Regulation	Madagascar	Wald=102.359 <i>p</i> <0.001	Wald=54.878 <i>p</i> <0.001		Wald=87.478 <i>p</i> <0.001	n.s.
	Nigeria	Wald=11.455 <i>p</i> <0.001	Wald=1.082 <i>p</i> >0.05	O.R.=8.9 [5.613, 14.010] <i>P</i> =0.899		O.R.=40.2 [5.466, 296.754] <i>P</i> =0.976
Strict Regulation	Gambia	Wald=18.669 <i>p</i> <0.001	Wald=14.477 <i>p</i> <0.001	Wald=2.129 <i>p</i> >0.05	Wald=13,116 <i>p</i> <0.001	

 Table 2.
 Likelihood of image advertising by country

Notes: n.s. = no significant difference (p>0.05), O.R.= Odds Ratio, P= Probability

attractive element for this country. In Uganda, 15.8% of the alcohol ads represent the nation as an attractive element. In Nigeria, 11.5% of the ads use sports as an attractive element. In Gambia, there were no attractive elements in the alcohol ads.

The linear regression analysis shows that alcohol ads in the Gambia have significantly less attractive elements in alcohol ads compared to alcohol ads in Nigeria (B=-.274 (t=-1.744) with p-1-sided=.041), Uganda (B=-.598 (t=-3.502) with p-1-sided<.001) and Ghana (B=-.897 (t=-4.777) with p-1-sided<.001). There was no significant difference between alcohol ads in Gambia and Madagascar (p>0.05). Alcohol ads in Madagascar also have less attractive elements than those found in Nigeria (B=-.174 (t=-2.747) with p-1-sided=.003), Uganda (B=-.499 (t=-5.770) with p-1-sided<.001) and Ghana (B=-.797 (t=-7.250) with p-1-sided<.001). Alcohol ads in Nigeria use less attractive elements than those found in Ghana (B=-.623 (t=-5.168) with p-1-sided<.001) and Uganda (B=-.324 (t=-3.522) with p-1-sided<.001). Although we hypothesized not to find any differences, alcohol ads in Ghana have significantly more attractive elements than ads found in Uganda (B=-.298 (t=-2.164) with p-1-sided=.016).

Overall picture of differences in outdoor alcohol advertisements between countries:

To get a summary of how ads in each country score on several characteristics a graph with means have been drawn (see figure 2).

Figure 2 shows that outdoor alcohol advertisements in the Gambian are on average less attractive to youth and smaller

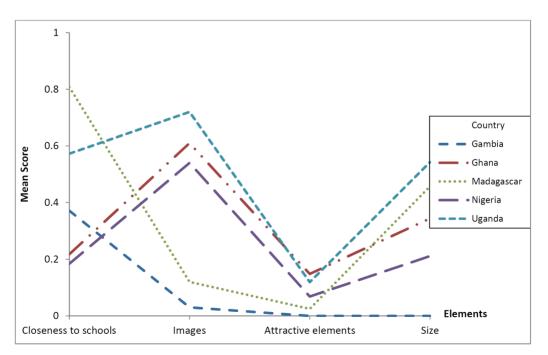


Figure 2. Average score on closeness to schools, images, attractive elements and size by country.

in size compared to alcohol advertisements in the other countries. However, by promoting alcohol advertisements on packages of soft drinks (on crates), alcohol marketers have found a way to market closer to schools and playground as seen in Ghana and Nigeria. As expected, the economic regulation in Nigeria does protect young people against large size and attractive outdoor alcohol promotion better than the countries in which self-regulation is in place but not as well as in the Gambia. Outdoor alcohol advertisements in both countries that are only regulated by self-regulation do not differ much, except for placement near schools. In Uganda, outdoor alcohol advertisements are placed on average more close to schools than in Ghana.

DISCUSSION AND CONCLUSION

This paper aims to describe findings of a systematic monitoring exercise conducted in five African countries (the Gambia, Ghana, Madagascar, Nigeria and Uganda) to examine outdoor alcohol advertising. In our analysis we have found that the differences in the use of marketing channels in countries studied suggest that alcohol marketers use various marketing strategies in different countries, depending on the culture's alcohol acceptability and the regulatory framework that is in place.

Generally in the Gambia, a country with more stringent alcohol marketing regulations than the other countries, and a less tolerant culture on alcohol use, very little outdoor alcohol advertising other than beer crates was found. Alcohol producers here market their product by the use of product display particularly through promotion on crates. Most of the selling points at which these stacked crates were observed, sold no alcoholic beverages. These crates often contain only soft drinks, but constitute an alternative way of promoting alcoholic drinks.

Regardless of the marketing channel used, the use of image advertising (i.e. images showed more than product information) is not common in the Gambia, in line with the use of beer crates and promotional items which generally did not have images. There were significantly less attractive elements in advertisements in the Gambia compared to the other countries, supporting the role of regulation. Results from analyzing the size of advertisements demonstrate that the size of advertisements in the Gambia are smaller than the other countries studied. With respect to placement of advertisements near schools, advertisements in Nigeria were more likely to be placed further from schools than Gambia, while surprisingly there was no significant difference between advertisements in the Gambia and Ghana, indicating a potential gap in Gambian regulations, or stricter regulation in Nigeria and Ghana.

In Ghana, alcohol is frequently marketed by paintings on walls and fences. As described in the MAMPA report (De Bruijn, 2011), painting buildings to market alcohol is part of the Ghanaian tradition: Traditionally, bars in Ghana selling unrecorded alcohol are painted in blue and white. This way, people can recognize the locations where alcohol is sold. Although small posters of alcohol brands are shown on the outside of the kiosks, alcohol-branded posters are almost always found inside the bar which are not visible from the street and are not included in this study. Besides the blue and white bars, international brands often interact with this traditional type of marketing alcohol by painting bars in specific colors (De Bruijn, 2011). This type of alcohol advertising shows people not only where they can buy alcohol, but also the "recommended" brand of choice. These painted bars are not only found in large cities, but also in small towns and villages (De Bruijn, 2011). Reaching the capital city of Ghana, traffic junctions were covered with billboards of different products. Alcohol-branded billboards were frequently found. These billboards mostly advertised international beer and spirit brands. In some places alternatives to billboards were placed to reach out to the crowd. Posters, along with billboards, were often found in the city centre as well. There were significantly more attractive elements used in advertisements in Ghana, and to a lesser degree in Uganda, suggesting that self-regulation is related to image advertising and the use of attractive elements. The results of the size of advertisements showed that ads in Ghana are larger than those found in Nigeria and Gambia, where there is stronger regulation in place. Although Uganda and Ghana are virtually the same with respect to level of regulation and global alcohol companies active in the country, it was found that advertisements in Ghana are placed further away from schools compared to Uganda. No conclusive explanation can be given for this difference except for the preference of marketers in Ghana to use the walls of pubs and bars to place their ads. This tradition is less flexible compared to the use of billboards and posters which are the marketing channel of choice in Uganda.

In Madagascar, alcohol is frequently advertised through the use of posters, and flags or signs. Regulation in Madagascar states that advertising of fermented beverages cannot portray a positive influence on health and longevity. Advertising of distilled beverages is prohibited except for providing product information only. In the advertisements observed in Madagascar, there was a significantly lower chance of advertisements containing images other than product information and attractive elements, however, it did not completely rule out potential breaches (i.e. advertisements showed image advertising and not solely product information) suggesting a need for stricter monitoring. Although the regulations in Madagascar do not refer to the size of the ads, the advertisements in Madagascar are smaller than those found in Uganda, which is in line with expectations. Madagascar's legislative base states that alcohol cannot be sold within 150 metres of an educational center, but there is no requirement to say that advertisements cannot be placed within this radius. Advertisements in Madagascar were found to be closest to school when compared to the other countries.

In Nigeria, small posters and product display were commonly used marketing channels. In both the city centre and the suburban area, there were not many large alcohol posters or billboards. The lack of large posters or billboards might be due to a governmental tax that is in place. Retailers and alcohol producers have found alternative ways to market alcoholic products, especially beer. Stacked crates of beer. often in combination with small posters, are displayed on the street to indicate selling points of alcohol. The frequency of places with crates of beer on the street indicate the numerous selling points and distribution centers of alcohol. Besides the benefit of creating more space inside the store for customers, crates of beer in front of the store are used as a marketing instrument (De Bruijn, 2011) In the village that was monitored, similar tactics were found. Industrial produced alcohol is promoted by small posters and the display of crates and beer cans. Locally produced alcohol is advertised more frequently in villages compared to the more urban areas. It is promoted by the display of mugs made from calabash or bottles of locally produced spirits in front of the stores and bars. Another marketing instrument which alcohol producers provide shop and bar owners with, is the use of chairs, tables, umbrellas and refrigerators with logos of the brand. Providing this material assures the alcohol companies that retailers will sell their brand. The likelihood of image advertising in Nigeria is greater than in the Gambia, but the same as Ghana, suggesting that Nigeria and Ghana have similar regulation (or non-regulation) with respect to image advertising. Yet, alcohol advertisements in Nigeria have less attractive elements than those in Ghana and Uganda, countries with only self-regulation, suggesting that regulation might facilitate dealing with attractive elements in advertisements. The results from the placement of ads near the school suggest that Nigeria and Ghana are similar with placement of advertisements near schools, which is comparatively further from schools than in Madagascar, Uganda and even the Gambia.

In Ghana and Uganda, alcohol marketers do not yet seem to be confronted by cultural or regulatory boundaries. Alcoholbranded posters and billboards were frequently found on the main roads and the city centre of the capital city of Uganda. On roads that were expected to be very busy during rush hour, large billboards were found. Some of the billboards covered whole buildings or the sideways of streets, dominating the street view (A. de Bruijn et al., 2014). There was also a high likelihood for advertisements in Uganda to contain image advertising compared to the Gambia. Madagascar. and Nigeria. There was no significant difference between Uganda and Ghana for image advertising suggesting that countries that have only self-regulation will have a high likelihood of image advertising, whereas stricter regulation will prevent image advertising. Advertisements in Uganda were larger than those in Madagascar, Nigeria and Gambia, and there was no difference in the size of advertisements in Uganda and Ghana. This again, suggests that regulations should control for the size of the advertisements. In Uganda, a country that has only self-regulation, advertisements were closest to schools compared to the other countries studied, except for Madagascar. In the case of Uganda, stricter regulation could mean that advertisements will be placed further away from schools.

Strength and limitations

Although alcohol marketing activities have been increased rapidly over the last few years in Africa. Independent monitoring of these activities is rather new. The MAMPA report (De Bruijn, 2011) illustrates alcohol marketing in African countries. The current paper aims to provide a quantitative description of differences between the countries studied. The paper focuses on outdoor advertising, a type of marketing that is very visible and can dominate the public arena. In practice, outdoor alcohol advertising often connects the consumer to points of sale for alcohol.

The volume of alcohol marketing practices is an important component when examining outdoor alcohol advertising. Since areas monitored were not identical in terms of size, the amount of advertisements in the areas identified could not be compared meaningfully. Future research is recommended to focus on quantity of alcohol advertisements. In this paper we were able to compare the placement near schools, attractiveness of the alcohol advertisements and their size. Aggregated data could be utilized in future research to be compared with cohort data to draw links between alcohol advertising and individual attitudes and behaviours ((Anderson, de Bruijn, Angus, Gordon, & Hastings, 2009).

The level of attractiveness of outdoor advertisements is measured by the presence of images and the number of attractive elements found in the advertisement. This method provides only an indication of level of attractiveness and does not cover the full spectrum of attraction. Future research is recommended to focus more on this element, for example by the use of (youth) rating panels (Babor, Xuan, & Damon, 2013; Babor, Xuan, & Proctor, 2008)

Policy recommendations

Most African countries are not prepared to deal effectively with societal and individual problems that result from alcohol use and misuse. To prevent these problems is even more challenging. Next to other control policy instruments like limiting the availability and affordability of alcohol (T. Babor et al., 2010), it is important to restrict or to prohibit alcohol advertising to prevent a one-sided, positive image of alcohol (De Bruijn, Johansen, & Van den Broeck, 2010), especially given the lack of a systematic and grounded prevention strategy in most countries. In an action plan for effective alcohol policy, Parry (2000) points out that the restriction of alcohol marketing is one of the most promising strategies for governments in developing countries.

Although the sample was too small for testing, preliminary results presented suggest that alcohol marketing regulations that are in place (together with cultural values), influence the characteristics of alcohol advertising in the public arena. For example, in the Gambia, the combination of clear and strict alcohol marketing regulations, the support of this regulation by the general public and the relatively small size of Banjul Brewery which is not owned by giant global alcohol companies, might explain why the Gambian youth is not exposed to much alcohol advertising. Important media and marketing channels, particularly television, radio, and sport sponsoring, are free of alcohol advertising. Yet, by permitting alcohol advertising on the street, increases in outdoor alcohol advertising can become an issue in the future. It is also important to note that advertisements in the Gambia are not necessarily placed furthest from schools compared to the other countries studied, and thus, this is an area that merits further monitoring. A ban on broadcasting alcohol marketing and alcohol branded sport sponsorship in the Gambia illustrates legal possibilities that governments of developing countries can take to address alcohol marketing in their country. Banning alcohol advertising from the public arena goes hand in hand with the aim to protect young people against exposure to alcohol advertising and promotion which could prevent increases in their alcohol use.

Regulations in Madagascar and Nigeria also suggest ways to improve alcohol marketing regulations. For example, in Madagascar's regulation, alcohol cannot be portrayed as having a positive influence on health and longevity and advertisements of distilled beverages can only provide product information. Including a clear stipulation such as this can potentially protect youth against alcohol harm, but there is also a need to ensure that such stipulations are enforced. The use of taxation on billboards in Nigeria discourages the use of this marketing channel, although, instead the alcohol industry places emphasis on other methods.

Findings presented in this paper suggest that the self-regulation of outdoor alcohol advertising is not able to protect young people against exposure to alcohol ads near their school, and against attractive and large size alcohol ads. The placement of alcohol advertisements near schools and playgrounds already illustrates that international selfregulation codes were not adhered to in Uganda. This self-regulating system is supported by the National Alcohol Policy drafted. These National Alcohol Policy drafts when being discussed were almost identical in Ghana and Uganda and rely fully on self regulation of alcohol marketing without a framework of legislation (Bakke & Endal, 2009). The role of the alcohol industry in the development of these policies is heavily criticized by experts specialized in alcohol and drugs as a development issue (Bakke & Endal, 2009; Dumbili, 2013).

In conclusion, further quantitative and qualitative research on restriction of alcohol marketing, monitoring regulations and reduced input from the alcohol industry are recommended as strategies to protect youth from exposure to alcohol advertisements and subsequent harm.

Declaration of Conflict of Interest: No conflict of interest has been declared by the authors. Projects in which data had been collected are commissioned and funded by WHO African Regional Office and Blue Cross Norway/Blue Cross Madagascar.

Acknowledgement: The authors would like to express their gratitude to all partners and advisors in the MAMPA 2010 project and EUCAM Madagascar Monitoring Project for their contribution and effort. A special thanks is given to Momodou Sambou of IOGT Gambia IOGT, Afran Yamson of IOGT Ghana, Prof Isidore Obot of Centre for Research and Information on Substance Abuse and Rogers Kasirye of Uganda Youth Development Link, Fanja Rasolomanana of Blue Cross Madagascar, and their colleagues.

REFERENCES

- Anderson, P., de Bruijn, A., Angus, K., Gordon, R., & Hastings, G. (2009). Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. *Alcohol Alcohol, 44*(3), 229-243.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., . . . Holder, H. (2010). Alcohol: No Ordinary Commodity-Research and Public Policy. Oxford: Oxford University Press.
- Babor, T. F., Xuan, Z., & Damon, D. (2013). A New Method for Evaluating Compliance with Industry Self-Regulation

Codes Governing the Content of Alcohol Advertising. *Alcoholism: Clinical and Experimental Research, 37*(10), 1787-1793.

- Babor, T. F., Xuan, Z., & Proctor, D. (2008). Reliability of a rating procedure to monitor industry self-regulation codes governing alcohol advertising content. J Stud Alcohol Drugs, 69(2), 235-242.
- Bakke, Ø., & Endal, D. (2009). Vested Interests in Addiction Research and Policy Alcohol policies out of context: drinks industry supplanting government role in alcohol policies in sub-Saharan Africaadd_2695 22.. 28. Addiction, 105, 22-28.
- Baumberg, B., & Anderson, P. (2008). Health, alcohol and EU law: understanding the impact of European single market law on alcohol policies. *Eur J Public Health*, *18*(4), 392-398.
- Casswell, S., & Thamarangsi, T. (2009). Reducing harm from alcohol: call to action. *The Lancet, 373*(9682), 2247-2257.
- Chen, M. J., Grube, J. W., Bersamin, M., Waiters, E., & Keefe, D. B. (2005). Alcohol advertising: what makes it attractive to youth? *J Health Commun*, *10*(6), 553-565.
- De Bruijn, A. (2011). Alcohol marketing practices in Africa: findings from the Gambia, Ghana, Nigeria AND Uganda. *Monitoring alcohol marketing in Africa MAMPA project.(MAMPA Project No. WM 274).* Brazzaville, Congo: World Health Organization Africa Regional Office.
- de Bruijn, A., Ferreira-Borges, C., Engels, R., & Bhavsar, M. (2014). *MONITOR-ING OUTDOOR ALCOHOL ADVERTIS-ING IN DEVELOPING COUNTRIES: FINDINGS OF A PILOT STUDY IN FIVE*

AFRICAN COUNTRIES - Online supplement, from http://www.eucam.info/ eucam/home/monitoring-outdooralcohol-advertising-.html

- De Bruijn, A., Johansen, I., & Van den Broeck, A. (2010). *Effective Alcohol* Marketing Regulations: A proposed framework to evaluate existing alcohol marketing regulations. Utrecht: STAP.
- De Bruijn, A., & Van der Waal, G. C. (2013). *Monitoring Alcohol Marketing in Madagascar*: Utrecht: EUCAM.
- Diageo. (2009). Diageo Marketing Code *Promoting responsible drinking*. Retrieved from http://www.drinkiq.com/ en-row/Documents/diageo-marketing-code.pdf
- Dumbili, E. W. (2013). The politics of alcohol policy in Nigeria: A critical analysis of how and why brewers use strategic ambiguity to supplant policy initiatives. *Journal of Asian and African Studies*, June 24, 0021909613490137.
- GALA. (2004). Country reports on advertising, marketing & promotion law developments Retrieved from http:// www.gala-marketlaw.com/membersonly/pdfs/Atlanta.pdf
- Grube, J. W., & Waiters, E. (2005). Alcohol in the media: content and effects on drinking beliefs and behaviors among youth. *Adolesc Med Clin*, *16*(2), 327-343, viii.
- Hackbarth, D. P., Schnopp-Wyatt, D., Katz,
 D., Williams, J., Silvestri, B., & Pfleger,
 M. (2001). Collaborative research and action to control the geographic placement of outdoor advertising of alcohol and tobacco products in Chicago. *Public Health Rep*, *116*(6), 558-567.
- Jernigan, D. H. (2001). Global status report: Alcohol and young people. *Geneva: World Health Organization, 57.*

- Jernigan, D. H. (2008). The Extent of Global Alcohol Marketing and Its Impact on Youth.
- Jernigan, D. H., Obot, I. S., & Jos, N. (2006). Thirsting for the African market. *African Journal of Drug and Alcohol Studies*, *5*(1), 57-70.
- Kelly, B., Cretikos, M., Rogers, K., & King, L. (2008). The commercial food landscape: outdoor food advertising around primary schools in Australia. *Aust N Z J Public Health, 32*(6), 522-528.
- Kelly, K. J., & Edwards, R. W. (1998). Image advertisements for alcohol products: is their appeal associated with adolescents' intention to consume alcohol? Adolescence, 33(129), 47-59.
- Kwate, N. O., Jernigan, M., & Lee, T. (2007). Prevalence, proximity and predictors of alcohol ads in Central Harlem. *Alcohol Alcohol*, *42*(6), 635-640.
- Kwate, N. O., & Lee, T. H. (2007). Ghettoizing outdoor advertising: disadvantage and ad panel density in black neighborhoods. *J Urban Health*, *84*(1), 21-31.
- Kwate, N. O., & Meyer, I. H. (2009). Association between residential exposure to outdoor alcohol advertising and problem drinking among African American women in New York City. *Am J Public Health, 99*(2), 228-230.
- Martin, S. E., Snyder, L. B., Hamilton, M., Fleming-Milici, F., Slater, M. D., Stacy, A., ... Grube, J. W. (2002). Alcohol advertising and youth. *Alcohol Clin Exp Res*, *26*(6), 900-906.

- Obot, I. (2006). Alcohol use and related problems in sub-Saharan Africa. *African Journal of Drug and Alcohol Studies*, *5*(1), 17-28.
- Odejide, O., & Ibadan, N. (2006). Alcohol policies in Africa. *African Journal of Drug and Alcohol Studies, 5*, 27.
- Parry, C. (2000). Alcohol problems in developing countries: challenges for the new millennium. *Suchtmed*, *2*(4), 216–220.
- Pasch, K. E., Komro, K. A., Perry, C. L., Hearst, M. O., & Farbakhsh, K. (2007). Outdoor alcohol advertising near schools: what does it advertise and how is it related to intentions and use of alcohol among young adolescents? J Stud Alcohol Drugs, 68(4), 587-596.
- Pinsky, I., & Silva, M. T. (1999). A frequency and content analysis of alcohol advertising on Brazilian television. *J Stud Alcohol, 60*(3), 394-399.
- Rehm, J., Mathers, C., Patra, J., Thavorncharoensap, M., Teerawattananon, Y., & Popova, S. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol use disorders. *The Lancet*, *373*, 11.
- World Health Organization. (2011). *Global* status report on alcohol and health. Geneva: World Health Organization.

Iboro F. A. Ottu¹, Aliu Adeniji Omotolani Oladejo²

¹Department of Psychology, University of Uyo, Uyo, Nigeria, ²Department of Psychology University of Ibadan, Ibadan, Nigeria

ABSTRACT

This study investigated the influence of discrimination and social identity on adolescent's substance use in selected secondary schools in Ibadan - an investigation predicated on the argument that angry, maladaptive and externalizing behaviours such as substance use could emerge from sustained social hostility and one's identity confusion. Three hundred and forty-six (346) adolescents were randomly selected from four schools to take part in the study. Results of univariate analysis show that social stress associated with perceived and actual discrimination led highly discriminated adolescents to report high levels of substance use compared to adolescents who experienced low levels of discrimination (F=8.84, df=1, 338, p<.001). Also, adolescents' social identity did not show significant influence on substance use but a tendency to use drugs among adolescents with low social identity compared to those with high social identity reported. This situation suggests the experience of identity confusion by adolescents who experience group hostility and discrimination. Also, a comparison of gender on drug use reveals males using more drugs than females (F=14.10, df=1, 338, p<.001). Based on these outcomes it was recommended that several social and governmental organizations starting from families should work together in the enlightenment of adolescents and the general populace on the need to respect the rights of every individual and live harmoniously. With this, adolescents will share more social acceptance and reduce the frequency of involvement in emotion-regulated substance use and other maladaptive and externalizing behaviours.

Key Words: Discrimination, Social Identity, Adolescents, Substance Use

Corresponding author: Iboro F. A. Ottu, Department of Psychology, University of Uyo, Uyo, Nigeria. Email: boirottus@lycos.com

INTRODUCTION

Substance use is one among the many dimensions of adolescent delinquent and addicted behaviours. The coincidence of adolescence as a period of schooling lends credence to numerous research reports indicating that drug and alcoholic activities are prevalent among in-school adolescents (e.g. Eneh & Stanley, 2004; Obot, Ibanga, Ojiji & Wai, 2001). While some young persons may "detachedly" experiment with alcohol and drugs, others become firmly attached to them and with time become serious or chronic substance users.

Drug use and dependence continues to present a significant public health problem and are associated with disproportionate costs to society in terms of criminal activity, spread of HIV infection and other diseases, medical expense, deaths on and off the road and disruption of local communities and families (Sussman & Ames, 2001). Drug and alcohol use during teen and adult years can lead to many problems for young persons and their families including skipping school, bad grades, conflict in relationships with friends and peers, rocky family relationships as well as poor brain function, concentration and development (National Institute on Alcohol Abuse and Alcoholism NIAAA, 2009). The sensitivity and importance of the adolescent stage of development to the overall success of an individual - especially school successmakes the present study very significant. Moreover, drug-abusing teens may also get into trouble with the law and end up in court and spend time in juvenile detention (United States Department of Justice USDOJ 2003).

Some research-based investigations have revealed that serious or chronic

juvenile offenders of the law are much more likely than other juvenile offenders to be substance users who may also exhibit some forms of substance use disorders (Mulvey, Schubert & Chassin, 2010). Basically, adolescent developmental tasks include challenges of identity, autonomy, sexuality, academic function and peer relationships (Cicchetti & Rogosch, 2002; Erikson, 1968).

Generally, substance use is a multifactorial bio-psychosocial process (Sussman & Ames 2001). This implies that there are multiple factors and causal pathways that influence peoples' propensity to substance use and dependence. There are several suspected influences contributing to substance use ranging from the not easily-modified intra-personal predictors to the easily-modified extra-personal variables. While intra-personal processes contributing to individual differences in substance use etiology include physiological susceptibility as measured in research on genetics (Goodwin, 1986, Cloninger, 1981), extra-personal predictors take into cognizance environmental, cultural and social influences.

Our present study is interested in investigating selected extra-personal predictors of drug use. These are discrimination and social identity. To be able to understand this, it is important for comparative reasons to review some dimensional aspects of intrapersonal inclinations to drug use. Studies have shown that affective disorders and personality correlates of neurobiological processes make certain individuals vulnerable to drug use (e.g. Bourgeois, Nelson, Slack & Ingram, 1999). There are also some research evidence that explicit cognitions such as beliefs or expectations may serve as some forms of motivation to engage in alcohol or other

drug use behaviours (Brandon, Herzog Irvin & Gwaltney, 2004). Intrapersonal motivational sources of drug use such as depression, trauma and post-traumatic stress disorder have also been implicated in some studies (e.g. Jaycox, Ebener, Damesek & Beecker (2004). In the same way, neuropsychological differences such as behavioural self-regulation, emotional regulation, inattention and cognitive function are also aspects of noticeable individual differences in drug and alcohol using behaviour among teen drug users and non-users. (Scheier & Botvin, 1996). This guiding information, which necessitates this study will help to examine discrimination and social identity as important social predictors of drug and alcohol use in a Nigerian sample.

Discrimination and Vulnerability to Drug Use

In considering the role of discrimination and social identity on adolescent drug use, it is important to understand the relationship between stereotyping and prejudice and the workability of the minority stress model (Meyer, 1995, 2003). This model posits that discrimination, internalized homophobia and social stigma can create a hostile and stressful social environment for human populations. The model, according to Dohrenwend (2000) cited in McCabe, Bostwick, Hughes, West and Boyd (2010), connects the literature demonstrating higher odds of mental health problems and alcohol use disorders among lesbian, gay and bisexual populations with well-established social science research that demonstrate the link between stress or stressful life events and poor health outcomes. Most research treats perceived discrimination as an independent variable and finds it to be positively associated with a variety of negative outcomes for young people (e.g. Brody, Kogan & Chen, 2012; Taylor & Turner, 2002). One study suggests that discrimination may lead to substance use or be mediated by adolescent anger and delinguent behaviours (Whitbeck, Hoyt, McMorris, Chen & Stubben, 2001). This appears possible when young persons ruminate (i.e., think about very carefully) on unpleasant discriminatory experiences from others. When McCabe et al (2010) examined the relationship between discrimination and substance use among three sexually-differentiated groups (Lesbian, Gay and Bisexuals), more than twothirds of the participants reported at least one type of discrimination in their lifetimes which also combined with either racial/ethnic discrimination or gender. These were associated with the tendency for the participants to use more substances with attendant disorders. In a South African study, Brook, Pahl, Morojele and Brook, (2006) examined the effect of demographic, personal, peer, parental and environmental factors on adolescent drug use. Among the environmental stressors examined were low socioeconomic status (assessed by measures of number of amenities and prevalence of hunger), victimization and discrimination. Results relating the environmental stressor domain showed that adolescents with higher levels of drug use reported greater discrimination and more violence directed toward themselves than those with lower levels of drug use. This result shows that the discrimination-drug use relationship may be reversible.

Social Identity and Drug Use

The group engagement model distinguishes among three aspects of identity: identification, pride and respect (Tyler & Bladder 2000). The group value model, later renamed the relational model emphasizes that inclusion within a group can provide a sense of self worth and identity (Tyler & Lind, 1992). Hartshom, Whitbeck & Hovt (2012) had reported in their study that discrimination experiences contribute to the etiology of anger and aggressive behaviours, including substance use, among indigenous adolescents. A selfidentity approach to behaviour suggests that people engage in behaviours that express their self-concept (Swann, Stein-Seroussi & Giesler, 1992). On the other hand a social-identity approach to behaviour addresses the role of social-identity as a determinant of health-related behaviour (Verkooijen, 2006). Group identity, which also encompasses engagement, has consistently been found to differentially influence people's drug use attitude depending on the value-structure of the group. For example Verkooijen, de Vries and Nielson (2007) examined the impact of group identity on frequent tobacco, alcohol and marijuana use among adolescents who reported involvements with either one, two or three subgroups. Results reported from the study showed that members of groups characterized by noisy and active activities were associated with higher risks of substance use compared to the groups with quiet and religious orientations. Interestingly, even among drug users, individuals still strive to reconstruct favourable identities to impute some forms of virtue to drug use. It has also been found that activity participation is the central nucleus of social identity in the same way that peer group membership and activity involvement are linked to identity exploration and to a sense of belonging to a particular type of peer group (Barber, Eccles & Store, 2001). In a recent study, Ravn (2012) examined young recreational drug users' self- and other- identity constructions using a focus group method, and found that participants clustered along six dimensions of drug practice which include: general drug knowledge, context specific drug knowledge, practices for checking drugs, acknowledging one's position in surrounding drug scene and age.

Based on research evidence that both discrimination and social identity could influence the use of drugs by adolescents, the researchers elected to investigate perceived discrimination and social identity among secondary school adolescents in Ibadan in relation to drug use. It is a common occurrence for group members to be treated either respectfully or rudely based on existing social stereotypes about group membership. Like other groups, adolescent natives of Ibadan usually come face to face with many stereotypes including the "historical identity" of the city as "dirty" and "filthy" (Ajala, 2011). Among suggestions listed by the present researchers to these adolescents during a face to face interview, they reported that "filthiness" and "hygiene issues" were among the reasons given by their "aggressors" in taunting and alienating them. Other issues were laziness, talkativeness and school performance. Aware of these forms of social hostility towards them as members of a group over erroneous stereotypes, victims keep on ruminating about such disrespectful and discriminatory attitudes which they feel also imply the violation of their moral values. Discrimination violets the three dimensions of an individual's group engagement, which include identification, pride and respect. A suitable empirical evidence guided by the

transactional models of stress is people's responses when encountering discrimination and prejudice as well as the effect of discrimination and prejudice on self-esteem and other coping variables (Major, McCoy, Kaiser, & Quinton, 2003a) Accordingly, such individuals may no longer identify with the group, feel proud about the group nor feel respected by the group. Deductively, discrimination tends to reduce social identity because of the stress and shame associated with social disapproval. To compensate for this, individuals may choose to engage in drug use or other self-defeating behaviours in order to inhibit helplessness. This presents as an open justification to constantly probe and understand the roles of discrimination and social identity in the context of in-school adolescents' drug use.

Gender and Drug use

A general trend in substance use research has been a greater occurrence of illicit substance use among males than among females. (Anderson, 1994, Svensson, 2003) In Nigeria, studies (e.g. Eneh & Stanley, 2004; Obot et al, 2001) have reported gender differences in the use of drugs by males and females. In the United States, the National Household Survey on Drug Abuse (NHSDA) and the Monitoring the Future (MTF) groups have remained leading sources of data on substance use, and have consistently documented this pattern over the years (Anderson, 1994). Drug use for both males and females usually start in the early teen years of a person's life. However, due to traditional ideas of patriarchy and gender role ideologies, it is believed that young men are more likely to use drugs than young women (Aggleton, Ball & Mane, 2006). A wide review of preclinical studies in the vulnerability of drug use revealed however, that females are more vulnerable than males during transition periods of drug use (Roth, Cosgrove & Carroll, 2004). While women are reported to use less drugs than men, they however become more addicted to alcohol than men (Zilberman, Tavares & el-Guebaly, 2003). Similarly, fewer women than men use alcohol, yet the frequency that young women are becoming intoxicated on alcohol on a regular basis is rising and the medical consequences of chronic alcohol consumption are more severe for women than for men (Becker & Hu, 2008). Based on all these factors (discrimination, social identity and gender) predicting substance use among adolescents, the study formulated and tested the following hypothesis:

1. Adolescents who express high levels of group discrimination and low levels of social identity as natives of Ibadan will significantly report higher levels of early involvement in substance use than those who experience low levels of group discrimination and high levels of social identity respectively.

METHOD

Research Design

We employed a cross-sectional survey method, specifically the ex-post facto design for the study. The independent variables were discrimination and social identity while the dependent variable was drug use.

Participants

Participants in the study were three hundred and forty six (346) adolescent students randomly but proportionately selected from the SS1-SS3 populations of four secondary schools in Ibadan, Nigeria namely: AL-Hayyu Group of Schools (67), Urban Day Grammar School (1) (136) Ogbere Community High School (1), (133) and Bolande Universal College (10). Their ages range from 12 to 25 years with a mean age of 16.2 years. Two of the schools were privately owned while two others were publicly managed. Among the students selected, 157 (45.4%) were males while 189 (54.6%) were females.

Instruments

A self report questionnaire was used for data collection. The questionnaire contained sections capturing the different aspects of participants' information. Section A assessed participants' demographic characteristics. Section B contained items from Whitbeck, Hoyt, McMorris, Chen & Stubben (2001) Perceived Discrimination Scale. It is a 10-item measure of individual and general discrimination trait, experiences and feelings. The authors reported a Cronbach alpha of 0.80 for the scale. The present study yielded a Cronbach alpha of 0.78. Section C of the questionnaire contains items which measure social identity. They were drawn from Cheek, Smoth and Tropp's (2002) Aspects of identity questionnaire. The 45-item guestionnaire has a 7-item subscale that measures social identity. It has a Cronbach alpha of 0.61 and the present study reported a reliability coefficient of 0.51. Section D of the questionnaire was made up of items from Whitbeck, et al, (2001) 23-item alcohol and substance abuse scale. It is divided into three parts. Serially, participants are to describe their opinion about their attitudes towards alcohol and drinking (5 items), indicate their pattern of involvement in alcohol abuse (5 items), and indicate how they

have used variously named substances in the past six months (13 items). It basically surveys the number of problems experienced in the past year by adolescents due to alcohol use. Items measure family and school issues related to alcohol. Responses were rated 0 = no. 1 = lifetime. 2 = past year and 3 = past month. For the section assessing substance use, adolescents are required to list the number of substances used in the past six months from a range of 0-11 substances including tobacco, alcohol, marijuana, inhalants, depressants, stimulants and hallucinogens. The scale has a Cronbach alpha of 0.80. The present study found a Cronbach alpha of 0.89.

Procedure

Pilot Study: A pilot study was conducted to standardize the instruments for Nigerian participants. Twenty-two (22) participants (8 males and 14 females) were selected from Adedamola College, Tokunbo Ojo Street, Orogun, Ibadan, for the study. They were 11 SS1 students, 7 SS2 students and 4 SS3 students. The students understood and responded to the items without difficulty. Reliability statistics of the scales showed that the social identity scale had a Cronbach alpha of 0.41, discrimination scale had 0.55 alpha coefficient while the substance abuse scale had a reliability coefficient of .61, .75 and .71 for the respective subsections.

Main Study

The researchers visited each of the schools after a written permission from the principal. The students were met in their respective classes where the purpose of the study was explained to them. In each of SS1, SS2 and SS3 classes the researchers told the students they were in

their school to compare the percentage of Ibadan indigenes who were in school with those of non-indigenes in order to know if they were responding to government's "goodwill" towards the education of the indigenes, as a way of preventing voung persons from engaging in child labour and begging. Each class was therefore divided into two groups of "Ibadan indigenes" and "others". The "non-indigene" group was therefore excused while the researchers administered the research instruments to gualified participants after detailed instructions and explanations were given. This approach of 'placating' non-participants was used in order to carry all students along without feelings of disrespect or mistrust regarding the purpose of the study. In all, a reasonable number of students in these schools were indigenes especially in the publicly managed schools. At the end of the exercise participants were properly debriefed.

Data analytic approach

Both descriptive and inferential statistics were used in data analyses. Frequency distribution of participants and their corresponding percentage values were used in describing participants' location, and class distribution. A correlational approach was alternatively used to examine the relationships among variables. The Analysis of Variance (ANOVA) was the statistical tool for testing hypotheses.

RESULTS

A careful analyses of the results showed that participants in the study emerged from eight out of the 11 local government areas that make up the Ibadan metropolis. There are however 33 Local Government Areas in Oyo State. A percentage distribution of the participants by Local Government Area is shown in Table 1 below.

Location/LGAs	Frequency	Percentage
Egbeda	59	17.1
Ona-Ara	20	5.8
Ibadan South West	72	20.8
Ibadan North	68	19.7
Ibadan North West	48	15.9
Moniya	20	5.8
Ibadan North East	43	12.4
Ibadan South East	16	4.6
Total	346	100.00
Class level	Frequency	Percentage
SS1	96	27.7
SS2	147	42.5
SS3	103	29.6
Total	346	100.00

Table 1. Descriptive statistics showing frequency distribution of study participants on location/Local Government Area and class level bases

	Variables	1	2	3	4	5	Mean	SD	N
1	Age	-					16.15	1.77	346
2	Class level	.321**	-				2.02	0.76	346
3	Social identity	.028	035	-			20.97	5.26	346
4	Discrimination	.091	066	.070	-		18.89	7.30	346
5	Substance Use	.188**	018	061	.227**	1.00	22.82	14.52	346

Table 2. Summary of Zero-Order bivariate correlation showing means, standard deviations and interrelationships among major study variables

** P<.01 (2 tailed)

The inter-correlation shows that there is a significant positive relationship between age and class level (r=.321; P<.01). There is also a significant positive relationship between age and substance use (r=.188; P<.01) and a significant positive relationship between discrimination and substance use (r=.227; P<.01). There was no significant relationship between class level and substance use (r=.018; P>.01) and also between social identity and substance use (r=.061; P>.01).

In order to test the hypothesis, a univariate analysis (ANOVA) was performed using the SPSS software 15.0 versions as shown in Table 3.

From the table, there are significant main effects of discrimination (F= 8.84, df=1, 338, p<.001) and gender (F= 14.10, df=1, 338, p<.001) on substance use among adolescents. Mean differences indicate that highly discriminated participants (\bar{x} =25.67, SD=15.93) significantly use more drugs than lowly discriminated participants (\bar{x} =19.80, SD=11.30). However, the social identity of participants does not have any influence on substance use. Mean differences indicate that participants who rate themselves higher on social identity use lesser drugs $(\bar{x}=21.10, SD=12.77)$ than participants who report lower levels of social identity

Source	Type III Sum of squares	df	ms	F	Sig.
Correlated model	6304.45	7	900.64	4.58	000
Intercept	167138.52	1	167138.52	850.75	000
Discrimination (A)	1735.79	1	1735.79	8.84	<.001
Social identity (B)	585.09	1	585.09	2.98	ns
Gender (C)	2770.01	1	2770.01	14.10	<.001
AxB	67.84	1	67.84	.35	ns
AxC	2.18	1	2.18	.01	ns
BxC	15.96	1	15.96	.08	ns
AxBxC	149.32	1	149.32	.76	ns
Error	664003.72	338	196.46		
Total	252810.00	346			
Correlated Total	72708.16	345			

Table 3. ANOVA Summary table showing main and interaction effects of discrimination,social identity and gender on substance use among adolescents

R squared = .078 Adjusted R² = .068

(\bar{x} =23.91, SD=15.46). There is therefore no significant difference between the two mean values. There are however no interaction effects of discrimination and social identity on drug use. No such interaction also exists in terms of gender and other variables.

DISCUSSION

The results of this study show that discrimination predisposes adolescents to early substance use. This finding confirms the research outcomes by Brody et al (2012), Hartshorn et al (2012), and Okamoto et al (2009). Other studies (Whitbeck et al, 2001; McCabe, et al, 2010; Brook & Pahl, Morojele & Brook, 2006) are also supported. Persons experiencing group discrimination tend to lose some aspects of their group-validated self-concept leading to the experience of stress and loss of self-esteem. In this way the basic aspects of an individual's groupbased attributes - identification, pride and respect - will adversely decline. Discrimination is a very strong psychological statement made by group members on an individual and can affect people in diverse ways leaving feelings of distress, disappointment, anger, sadness or disquiet depending on the level of one's attachment to the group. In the case of adolescents discriminated against by peers or community members, feelings of disillusionment can lead to the desire to acquire new selves through drug or alcohol use or other forms of social vices, which they may erroneously construe as "powerful" self-presentation.

Also, in the results, a prediction that low levels of social identity will lead to high levels of early substance use among adolescents compared to high levels of social identity remained unsupported. This outcome did not support the research findings of Verkooijen et al (2007) and Ravn (2012) specifically because it was not clear whether adolescent boys and girls of Ibadan, as students, belonged to specifically defined active or inactive group structure. This is because regulated school activities and programmes served to moderate the activities of the students and may not have allowed them, on their own, to determine the tempo of their group activities. Moreover, participants' social identity in this context remained threatened, as students may not show much enthusiasm and pride for being members of a group that discriminates against them. It is even more complex when the adolescents concerned belong to many groups who treat them with disdain. The marginal differences between the two means may represent the students' identity confusion about being indigenes of Ibadan thereby inhibiting their participation in group activities. The slightly lower mean appears to represent the students' 'unwavering' understanding that no matter the circumstances, they cannot "reconstruct" their ethnic (social) identity and so must accept their ethnic identity while the slightly higher mean may represent their unconscious psychological reactions and helplessness to discrimination as a form of hostility. The adolescents' view of their social identity appears to experience some forms of "approach-avoidance conflict" which the students find difficult to resolve. This assessment is in line with Barber et al's (2001) finding that peer group membership and activity involvement are linked to identity exploration. Our present study also failed to support the findings of James et al (2000) that high levels of cultural identity were associated with heavy drug use. The reason may be that these adolescents may not be happy and may then not use their group platform as a rallying point for "social networking and related peer activities".

The differential use of drugs by males and females in this study corroborates a number of studies which found that discrimination leads more to substance use specifically among males. Among these are conventional findings on gender and drug use such as Aggleton et al, (2003) and Zilberman et al, (2003). Other studies supported by our finding include Eneh and Stanley (2004) and Obot et al, (2001). This is in line with general research trend that males tend to use more substances than females. Culturally however, alcohol and drug use has not been a popular "pastime" among Nigerian girls and women for mostly social reasons. Women have however been known to encourage the "responsible" use of alcohol by men because they believe it is a sign of their men's virility. In most cases therefore, women "bask in the reflected glory" of male substance users and this, apart from indicating their virtual use of substances, also help the men to use more substances. However the difference is in where the line is drawn between "responsible" substance use and substance abuse.

Conclusion

Overall, findings of this study have shown that the roles of discrimination and social identity as adolescents' pathways to substance use are mixed and greatly depend on situations, roles and types of groups and the quality of peoples' attachment to their groups. While discrimination has clearly led to detrimental experiences that push adolescents into substance use as shown in this study, social identity has shown some forms of complexity that makes it malleable across situations. The non-significant role of self-identity in this study as a predictor of substance use may be explained as an outcome based on the difficult and multifarious conception of self-identity by different people (males and females) across different situations. In this study, adolescents were surveyed in their classrooms without relevant laboratory conditions to address confounding variables. It is therefore possible that adolescents' responses to the measures could have reflected some situational or other extraneous assumptions. Future research should therefore address such limitations to increase the external validity of the study.

REFERENCES

- Aggleton, P., Ball, A. & Mane, P. (Eds.) (2006). Sex, Drugs and Young people: *International Perspectives*. New York, NY: Routledge.
- Ajala, A.S. (2011). Space, Identity and Health Risks: a study of domestic waste in Ibadan, *Nigeria Perspectives*, 1, (1), 193-212.
- Anderson, T.L. (1994). "Drug Abuse and Identity: Linking micro and macro factors". *The sociological quarterly, 35*, 159-174
- Barber, B.L., Eccles, J.S. & Stone, M.R. (2001). Whatever happened to the Jock, the Brain, and the Princess? Young Adult Pathways Linked to Adolescent Activity Involvement and Social Identity. *Journal of Adolescent Research*, 16(5), 429-455.
- Becker, J.B. & Hu, M. (2008). Sex Differences in Drug Abuse. *Frontiers in Neuroendocrinology, 29(1)* 36-47.

- Bourgeois, J.A., Nelson, J.L., Slack, M.B. & Ingram, M. (1999). Comorbid affective disorders and personality traits in alcohol abuse at an Air Force Medical Centre. *Military Medicine* 164(2), 103-106.
- Brandon T., Herzog, T., Irvin, J. & Gwaltney, C. (2004). Cognitive and social learning models of drug dependence: Implications for the assessment of tobacco dependence in adolescents. *Addiction 99*, 51-77.
- Brody, G.H., Kogan, S.M. & Chen, Y. (2012). Perceived discrimination and longitudinal increases in adolescent substance use: gender and mediational pathways. *American Journal of Public Health, 102(5)* 1006-1011.
- Brook, J.S; & Pahl, T., (2006). Predictors of drug use among South African adolescents. *Journal of Adolescent Health, 38* (1), 26-34.
- Cheek, J.M., Smith, S.M., & Tropp, L.R. (2002). Relational Identity Orientation: A fourth scale for the Aspects of Identity Questionnaire. Paper presented at the meeting of the society for personality and social psychology, Savannah, G.A.
- Cicchetti, D., & Rogosch, F.A. (2002). A developmental psychopathology perspective on adolescence. *Journal of consulting and clinical psychology, 70,* 6-20.
- Cloninger, C.R. (1981). Inheritance of alcohol abuse. *Archives of General Psychiatry 38*, 861-868.
- Eneh, A.U, & Stanley, P.C. (2004). Pattern of substance use among secondary school students in Rivers State, Nigeria. *Nigerian Journal of Medicine, 13* (1), 36-39.
- Erikson, E. H. (1968). Identity, youth and crisis. New York: W.W.Norton Company.

- Goodwin, D.W. (1986). Genetic factors in the development of alcoholism. PCNA 9:427.
- Hartshorn, K.J.S., Whitbeck, L.B. & Hoyt, D.R. (2012) Exploring the Relationships of Perceived Discrimination, Anger, and Aggression among North American Indigenous Adolescents. *Society and Mental Health 2, 1,* 53-67.
- Jaycox, L.H., Ebener, P., Damesek, L., & Becker, K. (2001). Trauma exposure and retention in adolescent substance abuse treatment. *Journal of Traumatic Stress, 17*, 113-121.
- Major, B., McCoy, S.K., Kaiser, C.R. & Quinton, W.J. (2003A). Prejudice and Self-esteem: a transactional model. In W. Strobe & M. Hewtstone (Eds), European Review of Social Psychology (Vol. 14, pp. 77-104). London. Psychology Press.
- McCabe, S; Bostwick, W; Hughes, T., West, B; & Boyd, C. (2010). The relationship between discrimination and substance use disorders among lesbian, gay and bisexual adults in the United States. *American Journal of Public Health, 100* (10), 1946-1952.
- Meyer, I.H. (1995). Minority Stress and Mental Health in Gay men. *Journal of Health and Social behaviour, 36(1),* 38-56.
- Meyer, I.H. (2003). Prejudice, social stress and mental health in lesbian, gay and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin 129(5)* 674-697.
- Mulvey, E.P., Schubert, C.A. & Chassin, L. (2010). Substance Use and Delinquent Behaviour Among Serious Adolescent Offenders. Juvenile Justice Bulletin, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice.

- National Institute on Alcohol Abuse and Alcoholism (NIAAA) (2009). NIAAA five year strategic plan: FY 09-14: Alcohol across the lifespan. National Institute of Health- US Department of Health and Human Services.
- Obot, I.S; Ibanga, A.J., Ojiji, O.O., & Wai, P. (2001). Drug and alcohol consumption by out of school Nigerian adolescents. *African Journal of Drug and Alcohol Studies, 1* (2), 98-109.
- Ravn, S. (2012). Contested identities: Identity construction in a youth recreational drug culture. *European Journal of Cultural Studies, 15(4)* 513-527.
- Roberts, B. (2007). Gender Differences in Drug Abuse and Addiction – A cross cultural perspective. Contributor Network
- Roth, M.E. Cosgrove, K.P., & Carroll, M.E. (2004). Sex differences in the vulnerability to drug use: a review of preclinical studies. *Neuroscience and biobehavioural reviews 28,* 533-546.
- Scheier, L.M. & Botvin, G.J. (1996) Cognitive effects of marijuana. *Journal of the American Medical Association*, 275, 1547.
- Sussman, S. & Ames, S.L. (2001). The social psychology of drug abuse. Buckingham, U.K. Open University Press.
- Svensson, R. (2003). Gender differences in adolescent drug use: The impact of parental monitoring and peer deviance. *Youth and society 34* (3), 300-329.
- Taylor, J. & Turner, R.J. (2002) "Perceived Discrimination, Social Stress, and Depression in the Transition to Adulthood: Racial Contrasts". *Social Psychology Quarterly*, *65*(*3*): 213-225.

- Tyler, T.R. & Bladder, S.L. (2000). Cooperation in groups: Procedural justice, social identity, and behavioural engagement. Philadelphia: Psychology Press.
- Tyler, T.R. & Lind, E.A. (1992). A relational model of authority in groups. In M. Zanna (Ed). *Advances in Experimental Social Psychology* (25, pp. 115-191). San Diego: Academic Press.
- United States Department of Justice. (2003). Children at clandestine methamphetamine labs: Helping meth's youngest victims. *OVC Bulletin, June* 2003, office for victim of crimes.
- Verkooijen, K. (2006). Identity and Health-Risks Behaviour in Adolescence. PhD Thesis University of Southern Denmark.
- Verkooijen, K.T; Devries, N.K; & Nielsen, G.A. (2007). Youth crowds and substance use: The impact of perceived group norm and multiple group identification. *Psychology of addictive behaviours, 21*, 55-61.
- Whitbeck, L.B., Hoyt, D., McMorris, B., Chen, X., & Stubben, J. (2001). Perceived discrimination and early substance abuse among American Indian Children. *Journal of Health and Social Behaviour, 42*, 405-424.
- Zilberman, M., Tavares, H. & el-Guebaly, N. (2003). Gender similarities and differences. The prevalence and course of alcohol and other substance-related disorders. *Journal of Addictive Diseases, 22,* 61-74.

DRUG USE PATTERNS AND SOCIO-DEMOGRAPHIC PROFILES OF SUBSTANCE USERS: FINDINGS FROM A SUBSTANCE ABUSE TREATMENT PROGRAMME IN GABORONE, BOTSWANA

Morekwe Selemogwe¹, Seipone Mphele¹ & Kegomoditswe Manyanda²

¹Department of Psychology, University of Botswana, Gaborone, Botswana ²Botswana Substance Abuse Support Network (BOSASNet), Gaborone, Botswana

ABSTRACT

Substance abuse is a critical problem in Botswana, yet empirical evidence on substance users is limited. The current study sought to examine patterns of drug use and sociodemographic profiles of clients who sought treatment at a substance abuse treatment centre in Gaborone, Botswana. Findings showed clients' age ranged from 13-64 years with a mean age of 28.55 years and SD ±12.59 years. More than half of the clients reported use of legal drugs (76.9%, n=307) and alcohol was the most frequently reported drug (n= 236, 59.1%). In contrast, slightly more than half of the clients reported use of illegal drugs (53.1 %, n=212) with marijuana being the most prevalent reported illicit drug (74%, n=104). Chi-square analysis also showed differences in use of illegal drugs as a function of clients' gender (χ^2 (1) =13.51, *p* <001) and as a function of the clients' age (χ^2 (4) = 64.04, *p*< .000). The findings of the current study have implications for the formulation of efficient substance abuse policy and interventions and as such recommendations are provided.

Key Words: Substance abuse treatment, drug use, illicit drugs, Botswana, sociodemographic variables

INTRODUCTION

Substantial evidence highlights the scope of alcohol abuse problem in Botswana (Campbell, 2004; Clausen, Rossow, Ingstad, Molebatsi, & Holmboe-Ottesen, 2005; Gujadhur & Gaborone, 2000; Molamu, 1989; Molamu & MacDonald, 1996; Phorano, Nthomang & Ntseane, 2005; Pitso, 2004, Selemogwe & White, 2013; Seloilwe, 2005; Tran et al., 2013; Weiser et al., 2006; Zetola et al., 2014) and the majority of the findings underline high rates of alcohol abuse among college and university students (i.e. in Alao, Forcheh, Roy & Tidimane, 2004; Campbell, 2006;

Corresponding author: Dr. Morekwe Selemogwe, Department of Psychology, University of Botswana, P/Bag 00705, Gaborone, Botswana. Tel: (264) – 3554158 Email: selemogwe@mopipi.ub.bw

Seloilwe, 2005; Mphele, Gralewski & Balogun, 2013). Additionally, a few prior studies have highlighted the prevalence of illicit drug use among university students (e.g. in Alao, 2007), with marijuana being cited as the most common illicit drug of choice among the youth (Diamond and Narcotics Squad Report, 2012). Consistent with findings elsewhere, Botswana findings indicate alcohol abuse is more prevalent among male students compared to female students (Mphele, Gralewski & Balogun, 2013). Furthermore, problems associated with substance abuse have been noted in substantial prior studies and these include aggressive behaviour, physical injury, risky sexual behaviours, poor academic performance (Alao, 2007; Malete, 2007; Phorano, Nthomang & Ntseane, 2005; Peltzer, 2009; Seloilwe, 2005; Weiser, et al. 2006). Of concern are findings from recent research endeavours which signify alcohol abuse as one of the major factors that accentuate the spread of HIV/AIDS among the youth and adults (see Seloilwe, 2005; Chilisa, Bennel & Hyde, 2001) given the country's high prevalence rate of HIV/AIDS. Although empirical evidence highlights substance abuse problem in Botswana, there is scant research on factors that contribute to the etiology of substance abuse among Batswana. Some researchers attribute boredom and lack of recreational facilities to alcohol use among the youth (Bennel, Chilisa, Hyde, Makgothi & Mpotokwane, 2001).

Whilst there is substantial empirical evidence on alcohol abuse in Botswana, to date investigators have marginally examined the prevalence of illicit drug use despite police and media reports that denote illegal drug use among the youth. As per data from Diamond and Narcotics Squad unit in Gaborone, between 2009 and 2011, there were 57 drug possession cases in which students from public, private and tertiary schools were involved. Data from the Diamond and Narcotics Squad unit show that most students were arrested for cocaine and marijuana. In addition to the aforementioned drugs, other common illicit drugs among the youth are mandrax, ecstasy pills, methamphetamines (Mr. Nkgetse, personal communication, 2012). Important to note is that police reports only provide information from arrests and seizures data hence knowledge about extent of the problem is limited. The lack of empirical evidence on illicit drug use limits the knowledge about the extent of the problem and consequently impacts on the formulation of substance abuse interventions. Further, empirical data about the common characteristics of substance abusers is pivotal in formulating substance abuse policies, prevention and intervention strategies that meet the needs of the subgroups that are at risk (Atilola, Ayinde & Adeitan, 2013; Hasan et al., 2009; Onyeka et al., 2012).

Purpose of the Study

The goal of the current study was twofold; firstly to provide surveillance information about the prevalence and patterns of drug abuse among substance users and secondly to examine the demographic characteristics of clients who attended a substance abuse treatment facility in Gaborone, Botswana.

METHOD

Setting

The current study utilized archival data from Botswana Substance Abuse Support

Network (BOSASNet) which is located in Gaborone, Botswana. BOSASNet is a non-governmental organization which was formed by concerned members of the public with the aim to address the emergent substance abuse problem in Botswana. The organization opened in September 2010 and currently offers free outpatient services to the general public and these include: substance abuse education, prevention, and rehabilitation and support services. Treatment is provided by substance abuse counsellors of who majority have an undergraduate degree in psychology. The counsellors also have Substance Abuse Counsellors Training, Foundation Level offered by BOSASNet. Currently, BOSASNet is the only facility in the country that offers substance outpatient treatment hence why the organization was selected for the current study.

Procedure and Measure

Prior to conducting the study, ethical approval was sought from Ministry of Health. Botswana. The study used data from all completed clients' intake forms who sought drug abuse treatment between September 2010 and December 2013. Prior to extracting and coding information from clients' records, all identifying information was removed from the clients' records. The study examined clients' demographic variables such as gender, age group, occupation, place of stay/residence, referral source and their reported drug abuse. A coding protocol was developed by the researchers and all the reported drugs were coded as two binary variables, with reported drug abuse coded as 1 and code 2 = no drug abusereported. The list of drugs was based on the data from the Diamond and Narcotics Squad Report (2012). The reported drugs were also classified as either legal or illegal. The clients' demographic variables were coded as follows;

- 1. Gender, code 1= male code 2= female
- 2. Occupational status, code 1= employed, code 2=unemployed code 3= student, code 4= retired
- 3. Age range, code 1= 10-20 yrs, code 2=21-30, code 3= 31-40, code 4= 41-50, code 5= 51-60, code 6= 61 and above
- 4. Place of residence, code 1= Gaborone, code 2= outside Gaborone
- 5. Referral source , code 1= self, code 2= health professional, code 3= family member code 4= friend, code 5= media, code 6= previous clients, code 7 = police

The principal investigator coded the intake reports following which the other two investigators coded the same intakes in an effort to ensure reliability of the results. The coded intakes were assigned a code number with no possible tracking of information.

Data analysis

The data was analyzed using SPSS version 21. Descriptive statistics such as frequencies and cross tabulations were used to describe clients' demographic information and patterns of the reported abused drugs. Chi Square was utilized to establish relationships between the variables.

RESULTS

Clients' Demographics

Over a period of three years (September 2010 -December 2013), BOSASNet offered substance abuse treatment to 399 clients and their age ranged from 13 to 64 years. The mean age for the population

was 28.55 years with SD = 12.59. The study revealed that more than half of the program participants were men (83%, n=331) with women constituting 16.8% (n= 67) of the clients. The majority of the clients were employed (40.4%, n=161), followed by students (31.8%, n=127), the unemployed (24.8%, n=99) and one retired individual (0.3%). A significant number of the clients resided in Gaborone and the surrounding areas (71.9%, n=287) while 28.1 % were from different parts of the country. Furthermore, 38.6%, (n=154) of the clients were referred by either medical or mental health practitioners, less than 30% were referred by family and friends (26.6%, n=106), a sizeable portion was referred by the media (22.3%, n=89) whereas only a few were self refereed (5.01%, n= 20). The police department and previous clients from BOSASNet also referred clients to the facility (3.0%, n=12).

Drugs Abuse Patterns, Gender and Age

More than half of the clients reported abuse of legal drugs (76.9%, n=307). The legal drugs included alcohol, cigarettes and prescription drugs and alcohol was the frequently reported abused drug (n= 236, 59.1%). There was no significant relationship between legal drug abuse and gender, $\chi 2$ (1) = 3.04, p =.08 however chisquare analysis indicates differences in abuse of legal drug use as a function of clients 'age range, $\chi 2$ (4) =15.71, p=.003. In contrast, slightly more than half of the clients reported abuse of illegal drugs (53.1 %, n=212) and marijuana was the most prevalent reported illicit abused drug (74%, n=104). In addition, marijuana was more prevalent among poly-drug users, $\chi 2(1)$ = 85.00, p < .001. poly-drug users were also more likely to report alcohol abuse and and nicotine abuse. Table 1 below has detailed information about poly drug abuse report and reported drug abuse.

Furthermore, Chi- square analysis indicates differences in abuse of illegal drugs as a function of clients' gender, $\chi^2(1) =$ 13.51, p <. 001 and as a function of the clients' age range, $\chi^2(4) = 64.04$, p < .001. Drug abuse was prevalent among men however; heroin was the only drug that was not prevalent in this group. In contrast, none of the female clients reported neither ecstasy nor mandrax abuse. With regards to clients' age, drug abuse was common among clients in the age range of 21-30 years (43%, n=169). Findings also indicate early age substance use (29.3%, n=117) and 43% of these clients were below age 18. On one end, the prevalence of drug abuse was less prevalent among clients who were 40 years and older (9.5%, n=38). The results are illustrated in Table 2 below.

Table 1.	Cross tabulations of reporte	d poly drug abuse and	d reported drug use
TUDIC 1.	cross tubulutions of reporte	a poly alug abase all	a reported drug dise

Reported poly-drug use N (%)						
Reported drug use	Yes	No	χ²	df	P-value	
Nicotine	76 (58.46)	54 (41.54)	77.26	1	.000	
Alcohol	95 (73.08)	35 (26.92)	15.48	1	.000	
Marijuana	104 (80)	26 (20)	85.00	1	.000	
Crack Cocaine	6 (4.62)	124 (95.38)	.009	1	.924	

Substance/Drug	Gende	r N (%)	Age group				
	Male	Female	10-20	21-30	31-40	41-50	Above 50
Prescription drugs	2(0.50)	1(0.25)	2(0.50)	0(0)	1(0.25)	0(0)	0(0)
Nicotine	101(25.31)	17(4.26)	41(10.28)	45(11.28)	22(5.51)	4 (1.00)	6(1.50)
Alcohol	192(48.12)	44(11.03)	40(10.03)	103(25.81)	63(15.79)	19 (4.76)	12(3.0)
Marijuana	173(43.36)	14(3.51)	76(19.05)	90(22.56)	19(4.76)	1(0.25)	1(0.25)
Crack cocaine	13(3.26)	6(1.50)	0(0)	13(2.26)	6(1.50)	0(0)	0(0)
Cocaine	5(1.25)	2(0.50)	1(0.25)	4(1.00)	2(0.50)	0(0)	0(0)
Crystal							
Methamphetamine	1(0.25)	0(0)	0(0)	1(0.25)	0(0)	0(0)	0(0)
Ecstasy	2(0.50)	0(0)	1(0.25)	1(0.25)	0(0)	0(0)	0(0)
Mandrax	2(0.50)	0(0)	1(0.25)	1(0.25)	0(0)	0(0)	0(0)
Heroin	0(0)	2(0.50)	1(0.25)	0(0)	0(0)	1(0.25)	0(0)

 Table 2.
 Frequency of reported drug use, gender and age range

Drug use patterns and employment status

Abuse of legal drugs was more prevalent among the employed (χ^2 (4) = 17.04, p= .002) and the common abused drug among this group was alcohol (73.9%, n=119). In contrast, illegal drug abuse was more prevalent among students (χ^2 (3) = 65.54, p< .001) and the frequently reported abused drug among this group

was marijuana (n= 95, 23.8%). In addition, abuse of prescription drugs and crystal methamphetamines was only prevalent among this group. Similar to students group, marijuana abuse was frequently reported by the unemployed clients (13.5%, n=44) and report of mandrax abuse was only observed within this group. Table 3 below has detailed information of employment status and drug patterns.

Substance/Drug				
	Employed	Unemployed	Student	Retired
Prescription drugs	1 (0.25)	0 (0)	2 (0.50)	0 (0)
Nicotine	44 (11.03)	28 (7.02)	46 (11.53)	0 (0)
Alcohol	161 (40.35)	52 (13.03)	57 (14.29)	1 (0.25)
Marijuana	33 (8.27)	54 (13.53)	95 (23.81)	0 (0)
Crack cocaine	11 (2.76)	7 (1.75)	1 (0.25)	0 (0)
Cocaine	3 (0.75)	0 (0)	4 (1.00)	0 (0)
Crystal methamphetamine	0 (0)	0 (0)	1 (0.25)	0 (0)
Ecstasy	1 (0.25)	1 (0.25)	0 (0)	0 (0)
Mandrax	0 (0)	2 (0.50)	0 (0)	0 (0)
Heroin	1 (0.25)	0 (0)	0 (0)	0 (0)

Table 3. Drug use patterns and employment status

Note: Information was missing in some of the intake forms as such the numbers/ percentages on some variables do not add up 399 (100%).

DISCUSSION

The findings of the current study are consistent with findings from prior studies conducted in Botswana and those from elsewhere which indicate alcohol as the most common abused drug (i.e in Lopes, No'brega, Del Prette, Scivoletto, 2013). Easy accessibility, availability and affordability of alcohol especially homemade alcohol brews or non-commercial alcohol have been noted to contribute to the high prevalence of alcohol abuse in the country (von Rudolf, 2010). In addition; the high prevalence of alcohol abuse among Batswana is also attributable to social norms for tolerance of alcohol use in ceremonial activities (Molamu, 1989) and the lack of entrainment facilities (Gujadhur, 2000). Findings of the current study also confirm results by Alao (2007) and Diamond and Narcotics Squad Report (2012) which indicate marijuana as the most prevalent illicit drug among drug users. Reports of marijuana abuse were also prevalent among polydrug-abusers and this finding has been observed in several studies (see e.g. Conway et al., 2013; Onyeka, et al., 2012; Rather, Bashir, Sheikh, Amin, & Zahgeer, 2013) and marijuana users were likely to report alcohol abuse. In light of the "gate way hypothesis" which postulates that alcohol use facilitate subsequent initiation of marijuana use and consequently initiation of use of other drugs (see Fiellin, Tetrault, Becker, Fiellin & Hoff, 2013; Guxens, Nebot & Ariza, 2007; Olthuis, Darredeau, & Barrett, 2013), findings on poly-drug users' abuse patterns highlight a need to establish clients' developmental sequence involvement in drugs as this information can be used as a platform for formulating primary and secondary substance abuse interventions.

Gender differences were also observed; men were more likely to report drug abuse compared to their female counterparts. The results are consistent with findings from several prior studies (e.g in Alao, 2007; Campbell, 2006; Mphele, Gralewski & Balogun, 2013: Seloilwe, 2005). Studies that examined profiles of substance abusers in treatment facilities have also revealed the same gender differences among substance abusers (e.g. in Onyeka et al., 2012; Parry, Plüddemann, & Myers, 2005; Prajapati, Thakkar, Parikh, & Bala, 2013). It is probable that females who abuse drugs do not access drug treatment facilities as compared to males hence the high prevalence of drug abuse report among the male clients. In some studies, the noted gender difference among substance abusers has also been attributed to cultural acceptance of men's drug use, which according to some authors (e.g. Kumar et al., 2013; Rather et al., 2013) can result in females feeling embarrassed to seek drug treatment. As indicated above, prior studies have consistently shown that drug abuse is more prevalent among men than women and this might account to the low numbers of females in treatment compared to their male counterparts found in the current study.

The current study further indicates that substance abuse differs by age group. Substance abuse report was more prevalent among clients whose age range was 21- 30 but was less prevalent among older clients. This finding affirms Clausen, Rossow, Ingstad, Molebatsi, & Holmboe-Ottesen (2005) findings which showed that only 12% of the sample of older persons in Botswana was classified as hazardous drinkers. Similar findings were observed in studies conducted in India (Prajapati, Thakkar & Parik & Bala, 2013). Similarly, research concerning the progression of substance use indicates that substance abuse peaks in early adulthood but declines with age thereafter (Chen & Jacobson, 2011). Noteworthy is substance abuse reported by underage children. Given that the legal age for drinking in Botswana is 21 years, the study's findings suggest prevalence of early age drug use among children in Botswana. Given the influential role of the media on children's' behaviour (see Scull, Kupersmidt, & Erausquin, 2013), some of the possible enabling factors for underage drinking in Botswana are the lack of legally binding regulations on alcohol advertising and product placement and the non existence of enforceable regulations regarding health warning labels on alcohol advertisements/ alcohol containers and alcohol sales promotions (see WHO, 2014). Of concern is that early age onset of drug use has been identified as risk factor for subsequent use (Kumar et al., 2013; Peltzer, 2009) and as such, further investigation of substance abuse among this subgroup is much needed in Botswana.

In contrast to most findings (e.g. in Henkel, 2011; Onyeka et al., 2012), the present study revealed that legal drug abuse report was common among the employed compared to the unemployed. Important to note is that studies on substances in the workplace demonstrate the prevalence of substance use and abuse among employees (e.g. in Harker Burnhams, Dada, Linda, Meyers & Parry; 2013). Not surprising, compared to other groups, abuse of expensive drugs was more prevalent among the employed. Several reasons have been attributed to prevalence of substance abuse among the employed. According to Harker Burnhams et al. (2013), certain work places and occupations have been shown to increase the likelihood of substance use due to their stressful nature as such further investigation is needed to unearth the link between employment and substance abuse in Botswana. With regards students' substance abuse, the prevalence of various drugs among this group mirrors findings from reports from Botswana Diamond and Narcotics Squad (2012) and findings from other countries (e.g. Atwoli, Mungula, Ndung'u, Kinoti & Ogot, 2011; Patrick et al., 2013; Parry, Myers, Morojele, Flisher, Bhana, Donson, Pluddenmann, 2004). In light of the well documented risk factors of substance abuse among adolescents and the youth, which include peer influence, familial role models who abuse drugs, dysfunctional family structure and lack of discipline, and family substance abuse history (Conway et al., 2013; Gutman, Eccles, Pec & Malanchuk, 2011; Trucco, Colder, Bowker, & Wieczorek, 2011; Van Ryzin, Fosco, & Dishion, 2012) it is important to extensively explore factors that predispose Batswana youth to drug abuse in order to come up with effective substance abuse interventions that target this subgroup. Furthermore, findings regarding media and family referrals underscore the importance of the involvement of the society in addressing substance abuse problems in the country. As such more effort should be exerted to use the media to address the evident substance abuse problem in Botswana.

Limitations

The findings of the current study should be considered in light of the study's limitations. The current study only relied on clients' drug abuse self reports and did not utilize data derived from any objective drug use/abuse assessment tools. However,

noteworthy is that such assessments are normally conducted after intake sessions. Future research needs to also examine clients' drug abuse as measured by objective means as urinalysis and blood tests as well as substance use measures such as the Alcohol Use Disorder Identification Test (AU-DIT), to ensure accuracy in determining the patterns of drug use in Botswana. Another noteworthy limitation is the missing data in some of the utilized intakes which limits a true reflection of the patterns of drug abuse and socio-demographic information of substance abusers who seek treatment. The study population may not be representative of substance abusers in Botswana given that large majority of the clients were from one area of the country and also did not include drug users who do not seek treatment. Additionally other groups such the clients who are underage (10-18) were outnumbered by other age groups, therefore, findings about the substance abusers in this age category might not be a true reflection of those that did not seek treatment at the study site. Despite the study's limitations, the findings do provide preliminary data about drug abuse patterns and demographic information of substance abusers who seek treatment in Botswana.

Recommendations

The study's findings provide a platform for dialogue on prevention and intervention strategies that target subgroups that are at risk. More research effort is equally needed in addressing substance abuse among school children and the youth. School based substance abuse prevention programs are necessary to address early age drug abuse problems that are evidenced by the study's findings. In addition, findings on reported illicit drug

abuse necessitate more research on prevalence and patterns of illicit drug use in Botswana. Given the high prevalence of drug abuse among men, future research should also focus on identifying risk and protective factors associated with drug use among this population to aid in substance abuse prevention strategies that are gender specific. The study's findings also speak to a need to review the current Botswana substance abuse policy which mainly focuses on alcohol abuse. Policy review should be informed by empirical evidence as from the current study in order to formulate effective substance abuse prevention and intervention strategies. Furthermore, given the magnitude of clients who access services at BOSAS-Net, the need for more substance treatment facilities with specialized personnel can not be understated. A call for utility of objective assessments tools is also reflected by the findings of the study. More research that examines substance abuse in the workplace is also needed to identify occupations and work places that are high risk with the aim of developing interventions that are specific for employees. Finally, an exploration of barriers to treatment is essential in ensuring provision of treatment to all who need it.

REFERENCES

Alao, A. A. (2007). Alcohol Use in Universities: Analysis of Trends at the University of Botswana. In Sherri McCarthy., Stephen Newstead., Victor Karandashev., Carto Prandini.,Claudio Hutz and William Gomes, (Eds.).Teaching Psychology Around the World. Cambridge Scholars Publishing, Newcastle, NE5 2JA, UK, pp. 439-457.

- Atwoli, L., Mungla, P. A., Ndung'u, M. N., Kinoti, K. C., & Ogot, E. M. (2011).
 Prevalence of substance use among college students in Eldoret, western Kenya. *BioMed Central Psychiatry*, *11* (34), 1-9
- Bennel, P., Chilisa, B., Hyde, K., Makgothi, A., Molobe, E. & Mpotokwane, L. (2001). The impact of HIV/AIDS on primary and secondary education in Botswana: developing a comprehensive strategic response. Serial No.5. London: Ministry of Education/Department for International Development.
- Chen, P., & Jacobson, K. C. (2012). Developmental trajectories of substance use from early adolescence to young adulthood: Gender and racial/ethnic differences. *Journal of Adolescent Health*, *50*(2), 154-163.
- Clausen, T., Rossow, I., Ingstad, B., Molebatsi, R. M., & Holmboe-Ottesen, G. (2005). Patterns of alcohol consumption among older persons in Botswana. *Contemporary Drug Problems*, 32(2), 717-193.
- Conway, K. P., Vullo, G. C., Nichter, B., Wang, J., Compton, W. M., Iannotti, R. J., & Simons-Morton, B. (2013). Prevalence and patterns of polysubstance use in a nationally representative sample of 10th graders in the United States. *Journal of Adolescent Health*, 52(6), 716-723.
- Degenhardt, L., & Hall, W. (2012). Extent of illicit drug use and dependence, and their contribution to the global burden of disease. *The Lancet, 379* (9810), 55-70.
- Gujadhur, T., & Gaborone, B. (2000). Alcohol abuse intervention strategies for rural (Bushmen) settlements embarking on CBNRM. IUCN/SNV CBNRM support programme, Gaborone, Botswana.

- Gutman, L. M., Eccles, J. S., Peck, S., & Malanchuk, O. (2011). The influence of family relations on trajectories of cigarette and alcohol use from early to late adolescence. *Journal of Adolescence*, 34(1), 119-128.
- Guxens, M., Nebot, M., & Ariza, C. (2007). Age and sex differences in factors associated with the onset of cannabis use: a cohort study. *Drug and Alcohol Dependence*, 88(2), 234-243.
- Fiellin, L. E., Tetrault, J. M., Becker, W. C., Fiellin, D. A., & Hoff, R. A. (2013). Previous use of alcohol, cigarettes, and marijuana and subsequent abuse of prescription opioids in young adults. *Journal of Adolescent Health*, 52(2), 158-163.
- Harker Burnhams, N., Dada, S., Linda, B., Myers, B., & Parry, C. (2013). The extent of problematic alcohol and other drug use within selected South African workplaces. SAMJ: South African Medical Journal, 103(11), 845-847.
- Hasan, N. M., Loza, N., El-Dosoky, A., Hamdi, N., Rawson, R., Hasson, A. L., & Shawky, M. M. (2009). Characteristics of clients with substance abuse disorders in a private hospital in Cairo, Egypt. *Journal of Muslim Mental Health*, 4(1), 9-15
- Henkel, D. (2011). Unemployment and substance use: a review of the literature (1990-2010). *Current drug abuse reviews*, *4*(1), 4-27.
- Kumar, N., Kanchan, T., Unnikrishnan, B., Thapar, R., Mithra, P., Kulkarni, V., & Sarathy, S. (2013). Profile of Substance Use among Patients Attending De-Addiction Centres in a Coastal City of Southern India. *PloS one*, 8(2), e57824, 1-4.
- Lopes, G. M., Nobrega, B. A., Del Prette, G., & Scivoletto, S. (2013). Use of

psychoactive substances by adolescents: current panorama. *Revista Brasileira de Psiquiatria*, *35*, 51-61.

- Malete, L. (2007). Aggressive and antisocial behaviours among secondary school students in Botswana: The influence of family and school based factors. *School Psychology International*, 28(1), 90-109.
- Molamu, L., & MacDonald, D. (1996). Alcohol abuse among the Basarwa of the Kgalagadi and Ghanzi districts in Botswana. *Drugs: Education, Prevention, and Policy, 3*(2), 145-152.
- Molamu, L. (1989). Alcohol in Botswana: A historical overview. *Contemp. Drug Problems*, *16*, 3-42.
- Nkgetse, L. (2012). Botswana Diamond and Narcotics Squad. Gaborone, Botswana
- Olthuis, J. V., Darredeau, C., & Barrett, S. P. (2013). Substance use initiation: the role of simultaneous polysubstance use. *Drug and Alcohol Review*, *32*(1), 67-71.
- Onyeka, I. N., Uosukainen, H., Korhonen, M. J., Beynon, C., Bell, J. S., Ronkainen, K., & Kauhanen, J. (2012). Sociodemographic characteristics and drug abuse patterns of treatmentseeking illicit drug abusers in Finland, 1997–2008: The HUUTI study. *Journal of Addictive Diseases*, *31*(4), 350-362.
- Parry, C. D., Myers, B., Morojele, N. K., Flisher, A. J., Bhana, A., Donson, H., & Plüddemann, A. (2004). Trends in adolescent alcohol and other drug use: findings from three sentinel sites in South Africa (1997–2001). *Journal of Adolescence, 27*(4), 429-440.
- Parry, C. D., Plüddemann, A., Myers, B. J., & Myers, B. J. (2005). Heroin treatment demand in South Africa: trends from two large metropolitan sites

(January 1997-December 2003). *Drug and Alcohol Review*, *24*(5), 419-423.

- Patrick, M. E., Schulenberg, J. E., Martz, M. E., Maggs, J. L., O'Malley, P. M., & Johnston, L. D. (2013). Extreme binge drinking among 12th-grade students in the United States: Prevalence and predictors. *JAMA pediatrics*, 167(11), 1019-1025.
- Peltzer, K. (2009). Prevalence and correlates of substance use among school children in six African countries. *International Journal of Psychology*, 44(5), 378-386.
- Prajapati, A., Thakkar, J., Parikh, S., & Bala, D. V. (2013). A study of sociodemographic profile of substance abusers other than tobacco abuse attending a de-addiction centre in Ahmedabad City. *International Journal of Medical Science and Public Health*, 2(4), 924-927.
- Phorano, O., Nthomang, K., & Ntseane, D. (2005). Alcohol abuse, gender-based violence and HIV/AIDS in Botswana: establishing the link based on empirical evidence. *SAHARA-J: Journal of Social Aspects of HIV/AIDS*, 2(1), 188-202.
- Pitso, J. M. (2004). Does alcohol use take away condom use? Qualitative evidence from Selibe Phikwe and Mahalapye town districts, Botswana. *African Journal of Drug and Alcohol Studies*, 3(1&2), 53-73.
- Rather, Y. H., Bashir, W., Sheikh, A. A., Amin, M., & Zahgeer, Y. A. (2013). Socio-demographic and Clinical Profile of Substance Abusers Attending a Regional Drug De-addiction Centre in Chronic Conflict Area: Kashmir, India. *The Malaysian Journal of Medical Sciences: MJMS, 20*(3), 31-38.
- Scull, T. M., Kupersmidt, J. B., & Erausquin, J. T. (2013). The Impact of Media-

Related Cognitions on Children's Substance Use Outcomes in the Context of Parental and Peer Substance Use. *Journal of youth and adolescence*, (43), 717-728.

- Selemogwe, M., & White, D. (2013). An Overview of Gay, Lesbian and Bisexual Issues in Botswana. *Journal of Gay* & Lesbian Mental Health, 17(4), 406-414.
- Seloilwe, E. S. (2005). Factors that influence the spread of HIV/AIDS among students of the University of Botswana. *Journal of the Association of Nurses in AIDS Care*, *16*(3), 3-10.
- Tran, B. R., Thomas, A. G., Ditsela, M., Vaida, F., Phetogo, R., Kelapile, D., & Shaffer, R. (2013). Condom use behaviours and correlates of use in the Botswana Defence Force. *International journal of STD & AIDS*, 24(11), 883-892.
- Trucco, E. M., Colder, C. R., Bowker, J. C., & Wieczorek, W. F. (2011). Interpersonal goals and susceptibility to peer influence: Risk factors for intentions to initiate substance use during early adolescence. *The Journal of early adolescence*, *31*(4), 526-547.

- Van Ryzin, M. J., Fosco, G. M., & Dishion, T. J. (2012). Family and peer predictors of substance use from early adolescence to early adulthood: An 11year prospective analysis. Addictive Behaviours, 37(12), 1314-1324.
- Von Rudolf, A. (2010). Non commercial alcohol in Botswana: A case study from Nkoyaphiri district of Gaborone and Mogobane. Retrieved on May 29, 2014 from, www.global-action.org
- Weiser, S. D., Leiter, K., Heisler, M., McFarland, W., Percy-de Korte, F., DeMonner, S. M., & Bangsberg, D. R. (2006). A population-based study on alcohol and high-risk sexual behaviors in Botswana. *PLoS Medicine*, 3(10), 1940-1948.
- World Health Organization, Substance Abuse Department (2014). Global status of report on alcohol. Geneva: WHO.
- Zetola, N. M., Modongo, C., Olabiyi, B., Ramogola-Masire, D., Collman, R. G., & Chao, L. W. (2014). Examining the relationship between alcohol use and high-risk sex practices in a population of women with high HIV incidence despite high levels of HIV-related knowledge. Sexually Transmitted Infections, doi:10.1136/sextrans-2013-051244.

African Journal of Drug & Alcohol Studies, 13(1), 2014 Copyright © 2014, CRISA Publications DRINKING, VIOLENCE AGAINST WOMEN AND THE REPRODUCTION OF MASCULINITY IN ORON, NIGERIA

Ediomo-Ubong E. Nelson

Centre for Research and Information on Substance Abuse (CRISA) Uyo, Akwa Ibom State, Nigeria

ABSTRACT

Violence against women is recognized as a violation of human rights and a threat to the achievement of gender equality and development globally. Following suggested link between alcohol use and violence in previous studies, this study investigates the role of alcohol use and violence in the reproduction of masculinity. Qualitative data from in-depth individual and group interviews with 413 men in 6 villages in Oron, Akwa lbom State of Nigeria was used. The data reveals that men use violence in various ways towards their spouses to curb attempts to spurn traditional gender roles. Underlying most of the incidences of male violence is heavy use of alcohol, which is a potent cultural symbol of masculinity. Heavy drinking is common in these communities and its role in the incidence of violence against women is established by the accounts of participants. The rationalization of male violence with reference to the use of alcohol makes it clear that both practices are mutually implicated in the reproduction of local images of masculinity. Policy on alcohol problems and gender-based violence needs to recognize the metonymic significance of drinking and violence in the definition of manhood.

Key Words: Alcohol; Masculinity; Violence against Women; Nigeria

INTRODUCTION

Violence against women (VAW) is the most pervasive form of human right abuse globally (Ellsberg, 2006). It is both subtle and blatant, but its effects on women's health and societal development are multi-faceted. VAW is condoned and accepted in many societies (Shane & Ellsberg, 2002). It is defined as "any act of verbal or physical force, coercion or life-threatening deprivation, directed at an individual woman or girl that causes physical or psychological harm, humiliation or arbitrary deprivation of liberty that perpetuates female subordination"

Corresponding author: Ediomo-Ubong E. Nelson, Centre for Research and Information on Substance Abuse (CRISA), P. O. Box 923, Uyo, Akwa Ibom State, Nigeria Email: degreatnelson@yahoo.com

(Heise, Ellsberg & Gottemoeller, 1999). VAW also refer to "any act that results in or is likely to result in physical, sexual or psychological harm or suffering to women including threats such as coercion, arbitrary deprivation of liberty whether occurring in public or private life" (Phorano, Nthomang & Ntseane, 2005). Acts of VAW include physical abuse, rape, female genital mutilation, honour killing and emotional violation through the use of abusive language.

Studies (Golding, 1996; Ellsberg, 2006; Schuler, Hashemi & Badal, 1998) show the negative effects of violence on women. These include injuries, gynaecological disorders, mental health problems, adverse pregnancy outcomes and sexually transmitted infections (STIs). Violence also increases women's risk of future health problems. The effects of violence transcend women's sexual and reproductive health; it includes their general well-being, children's welfare, household livelihood and societal development (Heise, Ellsberg & Goettomoeller, 1999). VAW saps their energy, erodes their selfconfidence, undermines their productive capacity, and prevents them from contributing to the development of their communities.

VAW is gendered because it reflects unequal power relations between men and women. It perpetuates women's subordinate position in society, and legitimates male dominance and control. At the community level, the strict and rigid enforcement of gender roles, the association of manliness with toughness, dominance and control as well as cultural acceptance of the abuse of women have been noted as key predictors of VAW (Jewkes, 2002). Women's behaviour that trigger male violence are those that transgress gender norms (Schuller, Hashemi, Riley & Akhter, 1996; Jejeebhoy 1998), and they are violently resisted by men because they suggest women's attempt to spurn male control.

Studies suggests a relationship between substance abuse and violence (Bennett, 1995; Bennett et. al., 1994; Blount et. al., 1994). At the individual level, experimental studies reveal a consistent relationship between alcohol use and aggressive behaviour, especially in the presence of social cues that would normally elicit an aggressive response. The use of alcohol increases the aggressiveness of this response (Gantner & Taylor, 1992; Pihl et. al., 1993). Most of these studies statistically investigates causal relationships between alcohol, drugs and violence. But they do not provide information on the cultural meanings of alcohol use in relation to gender and violence, which can enrich policy and action to address VAW. This study is a narrative exploration of the interface between alcohol use, VAW and masculinity.

Alcohol and (Domestic) Violence: Existing Findings

The link between alcohol and violent crime has been established by research. Alcohol is implicated in one-half to twothirds of homicides, in one-fourth to nearly one half of cases of serious assaults, and in more than one-fourth of rape cases (Gondolf, 2005). It contributes to one-half of everyday incidence of violence (Pernanen, 1991). At the individual level, reviews (Collins, 1981; Roizen, 1993) and experimental studies (Taylor et. al, 1983; Gantner & Taylor, 1992) show an association between alcohol and violence. Alcohol is associated with homicide (Abel, 1987; Yarvis, 1994; Goldstein et. al., 1992), and VAW (Bennett, 1995; Bennett et. al., 1994; Roberts, 1987). It is involved in 20 percent of VAW in representative samples, and over 80 percent in clinical samples (Leonard & Jacob, 1988).

Alcohol use is not only linked to violent behaviour: it may even be part of the dynamics of sexual control (van der Straten et. al., 1995). The disinhibiting effects of alcohol is linked with sexual risk behaviour, including inconsistent condom use, multiple sexual partnering and extra-marital sexual relationships (Windle, 1997; Plant, 1990; Stall & Leigh, 1994). Studies show that alcohol use, VAW and sexual coercion, though under-reported, are prevalent in many cultures (Mamman et. al., 2000; Gracia-Moreno & Watts, 2000; Krug et. al., 2002). Recent studies show that alcohol use is an important catalyst for physical VAW and sexual coercion (Cunradi et. al., 2002; Weinsheimer et. al., 2005), and may significantly increase the likelihood of HIV transmission (Zablotska et. al., 2006). This is so because it disinhibit sexual risk-taking and is associated with unprotected sex (Zablotska et. al., 2006; Kalichman et. al., 2007).

The link between alcohol and violence is a deceptively complex one. Alcohol may be involved in violence either directly or indirectly. Studies indicate that alcohol is linked to VAW because of its psychophysiological effects, which impairs the abusers' sense of judgment and predisposes him/her to violence (Cervantes, 1992; Hamilton & Collins, 1981; Parker, 1993; Pernanen, 1991; WAD, 1999). Conversely, alcohol is used ideologically to justify VAW. Gelles & Straus (1979) observes that, "some men get drunk to give them an excuse to hit their spouses and children". Phorano, Nthomang & Ntseane (2005) also argues that alcohol use is indirectly related to VAW because drunkenness provides an acceptable condition for expressing anger and frustration. Alcohol use is just one contributing factor acting in concert with others such as stress arising from socio-economic problems.

The relationship between alcohol and violence has been captured in three theoretical models (Gondolf, 2005). The disinhibition model focuses on the pharmacological effects of alcohol on the nervous system in acts of violence. Heavy alcohol in-take is said to impair cognitive and physiological responses that would moderate aggression under conditions of sobriety. In the second model, alcohol serves as a socially-acceptable rationalization for violence. Aggressive behaviours are justified by attributing them to the effects of alcohol. In the third model. alcohol interacts with other factors, such as frustration and personality disorder, to cause violence. Studies support the view that alcohol abuse and VAW stems from men's desire for power and control. Both are strategies for asserting masculine control and/ or negotiating insecurities of manhood (Gondolf, 2005). But alcohol and violence are not just 'a semblance of power for fragile masculinity'; they are mutually-constitutive in the reproduction of masculinity.

Masculinity: Conceptual Setting

The way the concept 'masculinity' has often been used implies a 'simplified and static notion of identity, or rest on a simplified and unrealistic notion of difference between men and women' (Connell, 2002). Theorists have questioned the usefulness of the concept, arguing against the diverse and incompatible, positions adopted in theorizing about men (Hearn, 1996). Others have found existing definitions of masculinity to be vague, circular, inconsistent and unsatisfactory (Clatterbaugh, 1998). This has led some to jettison the concept. But as Connell (2002) observes, studying men presupposes a distinction from and relation with another group, women. Masculinity names 'conduct which is oriented to or shaped by that domain (gender), as distinct from conduct related to other patterns in social life' (Ibid).

Masculinity studies originated from social changes that presumably undermined men's ability to live up to their 'sex roles' (Campbell & Bell, 2000). Men and women were said to think and act in the ways they do, not because of their role identities or psychological traits, but because of concepts of femininity and masculinity adopted from culture (Pleck et. al., 1994; Courtenay, 2000). Earlier studies used the concept of 'male sex role' to explain this process of learning of norms for conduct. But the sex role theory proved to be inadequate for understanding diversity in masculinity (Connell, 1987). Recent studies transcend the sex role concept, and focuses on how gender patterns are constructed and practiced (Connell, 2002).

Social constructionism provides a range of methodologies for exploring situationally formed gender identities, practices and representations of men and boys. Masculinity, a set of subjective ideas and practices that enable men to achieve and project a hegemonic position, is not a static, essentialist and monolithic category, but a set of socially constructed relationships which are produced and reproduced through people's actions. It is constructed in different societal and historical spaces. To understand masculinity, one has to understand how masculinity is variably constructed as a social phenomenon (Campbell & Bell, 2000). Scholars prefer the plural version, 'masculinities', because of its variability across contexts.

Furthermore, masculinity is constructed in dynamic, dialectic relationships (Connell, 1995). Like gender of which it is a constitutive part, masculinity is 'something one does, and does recurrently, in interaction with others' (West & Zimmerman, 1987). It does not exist prior to social behaviour, either as bodily states or fixed personalities. It comes into existence as people act. It is accomplished in everyday conduct or organizational life, as patterns of practice (Connell, 2002). Since it is both achieved and demonstrated, it is best understood as a noun (Kaschak, 1992). It is not settled or given, but involves a complex and sustained effort at constructing identity and relationships. It is not a simple, homogenous pattern. Its construction is fraught with contradictions, and reveals contradictory desires and logic, involving multiple possibilities and complexities capable of generating tensions and changes in gender patterns.

The concept of 'hegemonic masculinity' captures the reality of hierarchy and dominance in the construction of masculinity. Hegemony signifies a position of cultural leadership and authority, not total dominance, since other masculinities persist and may even be more common (Connell, 2002). Hegemonic masculinity is highly visible, and dominant even in relation to the entire gender order, expressing 'the privilege men collectively have over women' (Ibid). It is not 'a fixed character type everywhere the same ... (but) the masculinity that occupies the hegemonic position in a given pattern of gender relations' (Ibid). It is the version that is legitimate, 'natural', or unquestionable in a particular set of gender relations (Campbell & Bell, 2000).

The Research Context

Oron is located between latitudes 50° North and longitude 90° East, at the right bank of the lower estuary of the Cross River. It shares a common boundary with Mbo Local Government Area (LGA) to the South and South-East: Okobo LGA to the North and North-East: Esit Eket and Ibeno LGAs to the South-West and Cross River State in the North-East. The area is the flood plain of Southeastern Nigeria with the land mainly intersected by numerous streams and tributaries flowing into the Cross River. The coastline stretches from Uva Oro to Udun Uko. The ancestry of the Oron people is disputed. Places such as Igbo-land and Palestine have been named as their ancestral home. It is however, very likely that Oron are Ibibio people, who migrated from the central Ibibio area to their present settlement in the hinterland of the Ibibio country (Udo, 1982). They speak Oro, a dialectical variation of the Ibibio language.

Oron people practiced traditional religion, but converted to Christian through the activities of foreign missionaries. A precolonial fishing economy, the area quickly developed into a major trading centre as imported European goods were traded for Palm Produce and other items. Drinking is a practice of historical and cultural significance. Heavy drinking pattern is the norm, and local production of alcoholic beverages has a long history. Drinking intensified with the arrival of westerntype alcoholic drinks, beginning from the early days of contact with European traders. The topographical realities of the area is unique, with its estuarine rivers spiralling along the extreme Gulf of Guinea, variously described by western missionaries and traders as the 'Liverpool' or 'Galilee' of Nigeria. The well-shaped promontories and glittering waters forms the basis of a fishing economy, which has also encouraged heavy drinking. Oron fishermen drink local gin, spirits and imported western liquor to keep warm in this cold habitat. Alcohol is also an integral part of the fishing economy and the local culture.

A patrilineal society, descent is traced from the male line to an epic male ancestor. The community is organized based on segmentary lineages, and there are no hierarchical or centralized socio-political structures (Beattie, 1964). The segments include minimal lineage (idip ete), either monogamous or polygamous; minor lineage (ufok), and maximal lineage (ekpuk). The minimal lineage (nuclear family), includes the man, his wife and children. The only social distinctions known in Oron are those based on age and sex, the latter being the most rigidly defined. The family is the basic unit of social organization. The father figure is primarily a disciplinarian and the culturally acknowledged head of the family (Charles, 2005). Women and children live under the de facto control of the man.

METHOD

The study was carried out in *Akan Obio*, Oron LGA, Akwa Ibom State, Nigeria. It was designed as a qualitative survey of the socio-cultural factors influencing VAW in the area. The ethnographic nature of the study explains its focus on a locality (cf. Schmidt & Room, 2010). A multi-stage sampling method was used to select participants. This involved purposive sampling of 6 villages from the community,

and clustering of households in the selected villages. Fishbowl sampling was used to identify and enumerate the specific compounds in each of the community from which participants would be drawn. Field workers, specially trained to collect data, visited the enumerated compounds and conducted in-depth, personal interviews with residents who were within the specified age range (25-45 years). The ethical principles of informed consent, confidentiality and anonymity applied (Fontana & Frey, 1994; Rubin & Babbie, 1997). The total number of participants was 413 (220 men and 193 women). Interviews relied on semi-structured indepth interview guide, which yielded rich, qualitative data. The data was analyzed descriptively, while patterns were identified in simple percentages. Focus group discussions (FGDs) were also conducted with a sub-set of the survey participants (46). Separate FGD sessions where held for men and women (7 participants per session). An audio recorder was used to record the discussions, while a field assistant took notes. FGDs provided space for elaborate discussion on the issues identified by the community survey. Tape records of the discussion where thereafter played and transcribed by the research assistants. The data was analyzed thematically following the data reduction, display and verification procedure (Miles & Huberman, 1994), involving thorough examination of the narratives fitted into analysis matrixes. Themes and patterns emerging from content analysis were noted. The themes where refined by the development of sub-themes, properties and their categories. This process continued until the point of analytic saturation was reached. Key comments are quoted verbatim.

RESULTS

The Participants: Key Demographic Information

Participants were between the ages of 31 – 45 years. The average years of formal education was 9 years, which means that most of them did not complete secondary school education. There was no stark illiterate among them, since all had some level of formal education. Most of them were married; only a few of them were divorced or separated (7.6%). Two participants whose marriage ended in divorce or separation stated that VAW was a contributor. Most participants were engaged in various occupations, from white collar iobs to commercial activities. Only a few (10.2%) were unemployed. They were all Christians, mostly of the Methodist church.

Cultural Geography of Male Drinking

Drinking is a common practice in the area. It is most common among men, although women are also known to drink. The normative pattern is heavy episodic drinking. Some participants said they drink six to eight bottles of beer in an instance. A group of four men were said to consume a litre of local gin (*ufo-fob*) in a single episode. Heavy drinking is attributed to the socio-cultural and geographical realities of the area, especially its coastal nature and the fishing economy. Participants agreed that drinking is a cultural reality. We were told:

We drink a lot of wine in this community because we are fishermen, and we live in a coastal area. The weather is very cold and we take hot drinks to keep ourselves warm, especially those of us who are into fishing.

Drinking is part of the practicalities of surviving the drudgery of fishing and the temperature of the area. Use of beverages such as liquor, spirits, and local gin (locally known as ufofob or kai-kai) keeps their body warm, enabling them to cope. Alcohol constitutes an important part of the fishing economy. It is usually presented as payment for apprenticeship in fishing, and also used in traditional rites meant to ensure success during fishing expeditions. Ceremonies, including funeral, child naming, marriage and chieftaincy coronation, also contribute to the high level of alcohol use in the area. The salience of alcohol in the cultural geography of the people is seen in this comment:

You have to drink to survive in this area. It is part of our history and culture. Our people are fishermen. We work and live in the river and because of the weather, we have to find a way to keep warm. This is why our people drink spirits and wine. We do so to keep warm. Even non fishermen drink too.

Participants use different kinds of beverages, including beer, stouts, liquor, spirits, imported western wine, palm wine and local gin. Only a small proportion (10%) did not drink. Majority of those who drink do so heavily, especially when drinking in the company of friends. This point was corroborated by observations at beer parlours, motels, ceremonies and newly emerging public drinking centres (popularly known as 'joints').

Alcohol, Health and Images of Masculinity

An essential part of the local drinking culture are rules regarding what kinds of

drinks should be used and who should drink. In the past, consumption of locally brewed beverages were circumscribed by rules specifying appropriate age and gender of user. Adult men were permitted to drink, while its use was considered inappropriate for women and young people. These rules, however, represented the normative position; in reality, both young people and women drank freely with little proscription. But this did not undermine the veracity of the normative order as they were expressed in local proverbs and songs deriding women for drinking.

Socio-cultural changes have exacerbated alcohol use in the area to the point where it is a major social and public health problem affecting all groups, most especially male youths. Drinking has been further problematized by recent sentinel surveys which indicate that the area has one of the highest rate of HIV prevalence in Nigeria. Men have also been identified as key contributors to the spread of the disease. They are the major users of alcohol in the area, which promotes sexual risk behaviours such as unprotected sex and multiple sexual partnership.

Drinking is as a symbol of masculinity in the local culture. Participants observed that drinking make them feel like 'real men', which is to say that it validates their masculinity. A participant stated, 'a real man is one who drinks and drinks well (i.e., drinks heavily)'. Others pointed out that a man should consume 'strong drinks' (i.e., beverages with a huge alcohol content). They also stated that a man who does not drink is effeminate, and lacks the quality of manhood. A participant stated:

A man has to drink. Any man who does not drink is not a real man. Men are known for drinking. That is why men organize ceremonies where lots of drinks are served to the people in attendance. It is a way of inviting your friends to come and drink and celebrate with you as you mark an important event in your life.

The only harm of drinking which participants recognized was accident due to drunk-driving. Drinking is seen as a socially-acceptable life-style for men. On the other hand, women who drink are derided, especially those who drink heavily. They are regarded as 'perverse women', and as prostitutes, because the latter are notorious for heavy drinking and smoking of tobacco. Participants stated that they do not permit their spouses to drink because those who drink are loose women.

Drinking, Violence and Masculinity

Majority of the participants (32.7%) stated that they have physically abused their spouses in the past, while 21% admitted abusing their spouse within the past week. A few (17.9%) reported using verbal threats on their spouses, and some did so frequently. Others (12.8%) had denied their spouses feeding money in the past. An abusive participant confesses:

I have hit my wife many times in the past. I am not proud of what I did, but sometimes you are provoked to do it. Women can be very stubborn such that you are left with no choice than physical force to assert your authority as a man.

Insubordination was the major reason participants physically abused their spouses. They argued that if a woman submits to her husband, there will be no violence. Instead the man will love his wife. But lack of submission will make the man resort to violence. Forced submission is an acceptable way of proving ones manliness. A man who does not make his wife submit to him is called a 'woman wrapper', which means that he is controlled by the wife. We were told:

The husband is the head of the wife and the wife should submit to her husband. There is a saying that two captains cannot stir the same ship. When a man and a woman seek to rule in the family, there will be problem. The man will tell the wife, "I am the head of this house so stay in your role".

The immediate triggers of violence varied. Some participants said they used violence because their spouse questioned them about where they've been and why they came home late. Others were violent because their spouse did perform domestic work, including cooking, washing and taking care of the children. Still others said they became violent because their spouse accused them of having extra-marital affair. What may be observed from these accounts is that the specific reasons for VAW are conducts that transgress gender norms.

Alcohol was an important predictor of participants' violent responses. They stated that they were drunk during most of the incidences of VAW. The majority (62%) stated that they were more likely to be infuriated by their spouses' behaviour when they are drunk than when they are sober. They expressed their displeasure by physical violence. A participant warned: when a man is drunk, a woman should not go looking for trouble then. But most women will still act childishly and push the man to use his fists.

DISCUSSION

This study investigated drinking, VAW and masculinity in Oron. As a descriptive ethnography, it entailed gaining "sufficient access to the study population to observe and record life as it occurs naturally, as opposed to merely interviewing people in artificial settings constructed or adopted for the purpose of research" (Merrill, Loomis & Clatts, 1999). It followed 'the tradition of a realist ethnography in which fieldwork as lived experience is indispensable for the production of anthropological knowledge' (Englund & Leach, 2000). The lack of control to allow for a focus on a narrow range of variables of interests, a major limitation of ethnography, was compensated by the latitude the design allows for exploration and discovery of patterns and relationships beyond the awareness of, and hence not self-reported by, the participants. The self-reported nature of the data means that both exaggeration and under-reporting of particular events are possible. But efforts to build rapport through a long period of stay with the participants greatly enhanced trust and openness in the course of interviews. Furthermore, descriptive details and comprehensiveness of the findings makes up for the problem of clarity and coherence fostered by the narrative nature of the data. Thus, the limitations notwithstanding, the study makes a meaningful contribution to the understanding of alcohol problems.

One of the findings of the study is that drinking and VAW are common in the area. This resonates with extant data on high levels of alcohol use in developing societies, such as Africa and South America (UNODC World Drug Report, 2013; Rehm, Rehn, Room et. al., 2003). Widespread use of alcohol validates the view that drinking is 'ubiquitous in the modern world' (Rehm, Rehn, Room et. al., 2003). In Nigeria, Obot (2000) has observed increase in alcohol use, particularly among young people, due to phenomenal growth in local production of beer since the 1970s. Poor communities, like Oron, are prone to drink to intoxication on any given drinking occasion, and tend to suffer more health and social effects from drinking (Schmidt & Room. 2010). Alcohol use is linked to a considerable burden of disease (WHO, 2003) and aggressive behaviour, such as VAW. High levels of VAW has also been reported in many developing countries, including Nigeria.

The study also suggests a relationship between alcohol use and VAW. Most participants who abused their spouses said this took place under the influence of alcohol. Studies have revealed a consistent relationship between alcohol use and violence, especially in the presence of social cues that normally elicit aggressive response (Gantner & Taylor, 1992; Pihl, 1993). Alcohol use increases the aggressiveness of this response. This trajectory has been termed 'alcohol myopia', a 'drunken excess' that predisposes an individual towards social cues that favour the use of violence (Steele & Joseph, 1990). Under conditions of sobriety the individual would not act that way because 'remoter cues and thoughts would pressure him to inhibit' (ibid). Heavy alcohol intake only compounds the problem, since the level of drinking is often causally related to the rates of serious violence against others (Lenke, 1990; Cooke & Moore, 1993).

A major finding of this study is that drinking and VAW are mutually-constitutive practices which reproduce

masculinity. 'Alcoholic beverages', writes Schmidt & Room (2010), 'are cultural artefacts and their use is highly charged with symbolism'. This symbolism is related to the construction of gender identities, especially that of masculinity. For example, Brown, Sorrell & Raffaelli (2005) argues that alcohol use is central to the performance of masculinity in a changing South African context. Ibanga, Adetula & Dagona (2009) contends that, 'drinking (is) viewed as a masculine behaviour, and further serves as a criterion for measuring maleness'... (and) not only is drinking considered a masculine thing to do, but that the ability to drink and do so heavilv establishes 'true masculinity". On the other hand, violence is a culturally acceptable male response to perceived women's 'insubordination' (Jejeeboy, 1998). Its instrumentality in the assertion of gendered position as family head, and in the validation of masculinity has also been established.

The study unravels the contextual values and gendered categories associated with drinking in local cultures, which is important for understanding and responding to alcohol problems. The instrumentality of alcohol in male violence against women is key to understanding the reproduction of masculinity. As a practice of historical and cultural significance, alcohol is appropriated as a symbol of masculinity. The justification of violence through attribution to alcohol hints at their mutual implication in the constitution of what it means to be a man. These processes deserve further investigation in different socio-cultural contexts in order to deepen understanding of the metonymic significance of drinking and violence in the cultural definition of manhood.

Conclusion

This study sought to contribute to present understanding of drinking and VAW as cultural practices which reproduce masculinity. Both drinking and violence are part of the socio-cultural construction of gender. Drinking is a socially-approved male behaviour; women's drinking is a contravention of traditional gender roles. VAW is an expression of masculinity; violence by women, where they occur, interrupts established gender categories. Drinking and violence then are mutuallyreinforcing practices which are shaped by patriarchal ideologies which perpetuates male dominance and the devaluation of women. In order to address the problem of alcohol use and VAW, as enjoined by the Convention for the Elimination of all forms of Discrimination against Women (CEDAW) and the Beijing Platform of Action inter alia, there is need to give attention to the dynamic construction of gender differences in local cultures, the role of drinking and domestic violence, and their impact on the lives of women.

REFERENCES

- Abel, E. L. (1987). Drugs and homicide in Erie County, New York. *International Journal of Addictions*, 22(2), 195-200.
- Beattie, J. (1964). Other cultures: aims, methods and achievements in social anthropology. London: Routledge.
- Bennett, L. W. (1995). Substance abuse and the domestic assault of women. *Social Work*, 40, 760-771
- Bennett, L. W., Tolman, R. M., Rogalski,
 C. J. & Srinivasaraghavan, J. (1994).
 Domestic abuse by male alcohol and drug addicts. *Violence Victims*, 9, 359-368

Blount, W. R., Silverman, I. J., Sellers, C. S., & Seese, R. A. (1994). Alcohol and drug use among abused women who kill, abused women who don't, their abusers. *Journal of Drug Issues*, 24(2), 165-177

Brown, J., Sorrell, J. & Raffaelli, M. (2005). An exploratory study of constructions of masculinity, sexuality and HIV/AIDS in Namibia, Southern Africa. *Culture, Health and Sexuality,* 7(6), 585-598

- Campbell, H. & Bell, M. M. (2000). The question of rural masculinities. *Rural Sociology*, 65(4) 532-546
- Cervantes, R. (Ed.) (1992). Substance abuse and gang violence. London: Sage.
- Charles, J. O. (2005). Social relations and the 'trinity' in Ibibio kinship: the case of Ibibio immigrants in Akpabuyo (Efikland) Nigeria. *Journal of Anthropological Research*, 61(3), 337-356
- Clatterbaugh, K. (1997). Contemporary perspectives on masculinity: men, women and politics in modern society (2nd edition). Boulder: Westview
- Collins, J. (ed.) (1981). *Drinking and crime*. London: Tavistock.
- Connell, R. W. (1987). *Gender and power:* society, the person and sexual politics. Sydney: Allen and Unwin
- Connell, R. W. (1995). *Masculinities.* St. Leonards, NSW: Allen and Unwin
- Connell, R. W. (2002). Understanding men: gender sociology and the international research on masculinity. *Social Thought and Research*, 24(1&2), 13-31
- Cooke, P. J. & Moore, M. J. (1993). Economic perspectives on reducing alcohol-related violence. In S. Martin (ed.) *Alcohol and inter-personal violence: multi-disciplinary perspectives*. NIAAA Research Monograph, 24 (193-212). Rockville, M. D. US Department of Health and Human Services

- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Social Science and Medicine*, 50, 1385-1401
- Cunradi, C. B., Caetano, R., & Schafer, J. (2002). Alcohol-related problems, drug use, and male intimate partner violence severity among US couples. *Alcoholism: Clinical & Experimental Research*, 26, 493–500.
- Ellsberg, M. (2006). Violence against women and the Millennium Development Goals: facilitating women's access to support. International Journal of Gynecology & Obstetrics, 94, 325-332
- Englund, H. & Leach, J. (2000). Ethnography and the meta-narratives of modernity. *Current Anthropology*, 41(2), 225-248
- Fontana, A. & Frey, J.H. (1994). Interviewing. In N.K. Denzin & Y.S. Lincoln (Eds).
- Handbook of qualitative research methods. Thousand Oaks: Sage.
- Gantner, A. B. & Taylor, S. P. (1992). Human physical aggression as a function of alcohol and threat of harm. *Aggressive Behaviour,* 18(1), 29-36
- Gelles, R. & Straus, M. (1979).Violence in the American Family. *Journal of Social Issues*, 35, 15-39.
- Goldstein, P., Brownstein, H., & Ryan, P. J. (1992). Drug-related homicide in New York: 1984 and 1988. *Crime and Delinguency*. 38(4), 459.76
- Golding, J. (1996). Sexual assault history and women's reproductive health. *Psychology of Women Quarterly*, 20, 101-121
- Gondolf, E. W. (2005) Alcohol abuse, wife assault and power needs. *Social Work Review*, 69(2), 274-284
- Garcia-Moreno, C., & Watts, C. (2000). Violence against women: its importance

for HIV/AIDS. *AIDS*, 14 (Suppl 3), S253–S265.

- Hamilton, C. & Collins, J. (1981). The role of alcohol in wife beating and child abuse: a literature review. In J. Collins (ed.), *Drinking and crime*. London: Tavistock.
- Hearn, J. (1996). Is masculinity dead? A critique of the concept of masculinity/masculinities. In M. G. Mac (ed.), *Understanding masculinities.* Buckingham: Open University Press
- Heise, L., Ellsberg, M. & Gottemoeller, M.(1999). Ending violence against women. *Population Reports Series*, 11
- Ibanga, A. K. J., Adetula, V. A. O., & Dagona, Z. K. (2009). Social pressures to drink or drink a little more: the Nigerian experience. *Contemporary Drug Problems*, 36, 111-135
- Jejeebhoy, S. J. (1998). Wife beating in rural Bangladesh: a husband's right? *Economic & Political Weekly*, 23(15), 588-862
- Jewkes, R. (2002). Intimate partner violence: causes and prevention. *Lancet*, 359(9), 423-429
- Kaschak, E. (1992). Engendered lives: a new psychology of women's experience. New York: Basic Books.
- Kalichman, S. C., Simbayi, L. C., Kaufman, M., Cain, D., & Jooste, S. (2007). Alcohol use and sexual risks for HIV/AIDS in sub-Saharan Africa: Systematic review of empirical findings. *Prevention Science*, 8, 141–151.
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., and Lozano, R. (2002). *World report on violence and health*. Geneva: World Health Organization.
- Leonard, K. and Jacob, T. (1988) Alcohol, alcoholism, and family violence. In Hasselt, V., Morrison, R., Bellack, A. & Hersen, M. (eds.), *Handbook of family*

violence (pp. 383-406). New York: Plenum.

- Lenke, L. (1990). Alcohol and criminal violence: time series analysis in a comparative perspective. Stockholm: Almqvist and Wiksell.
- Maman, S., Campbell, J., Sweat, M. D., & Gielen, A. C. (2000). The intersections of HIV and violence: directions for future research and interventions. *Social Science & Medicine*, 50, 459–478.
- Merrill, S., Loomis, P. M. and Clatts, M.
 C. (1999). Introduction: frontiers in AIDS and drug abuse prevention research – towards the integration of anthropological and epidemiological approaches. In Loomis, P. M., Merrill, S. and Clatts, M. C. (eds.). Cultural, observational and epidemiological approaches in the prevention of drug abuse and HIV/AIDS. Bethesda, MD: National Institute of Drug Abuse, 1-25
- Miles, B. & Huberman, A. (1994). Qualitative data analysis: an expanded sourcebook. London: Sage.
- Obot, I. S. (2000). Social change, urbanization and drug use among Nigerian youth. In Obot. I. S. and Ibanga, A. J. (eds.), *Perspectives on drug and society* (pp. 173-186). Jos: Centre for Research and Information on Substance Abuse.
- Parker, R.N. (1993).The effects of context of alcohol on violence. *Alcohol, Health and Research World*, 17(2), 117-123.
- Pernanen, J. (1991). Sociability and intoxication. Alcohol and drinking in Kenya, Africa, and the modern world. Helsinki: The Finish Foundation for Alcohol Studies.
- Phorano, O. D., Nthomang, K. & Ntseane,
 D. (2005). Alcohol abuse, genderbased violence and HIV/AIDS in Botswana: Establishing the link based on

empirical evidence. *Journal of Social Aspects of HIV/AIDS*, 2(1), 188-202

- Pihl, R. O., Peterson, J. B. & Lau, M. A. (1993). A biosocial model of the alcohol-aggression relationship. *Journal of Studies in Alcohol*, 11, 128-139
- Plant, M. A. (1990). Alcohol, sex and AIDS. *Alcohol*, 25, 293–301.
- Pleck, J. H., Sonenstein, F. L., & Ku, L. C. (1994). Problem behaviour and masculinity ideology in adolescent males. In Ketterlinus, R. D., Lamb, M. E (eds.) Adolescent problem behaviours: issues and research (165-186). Lawrence Erlbaum: Hillsdale, NJ.
- Rehm, J., Rehn, N., Room, R., Monteiro, M., Gmel, G., Jernigan, D. & Fick, U. (2003). The global distribution of average volume of alcohol consumption and patterns of drinking. *European Addiction Research*, 9, 147-156.
- Roberts, A. R. (1987). Psychosocial characteristics of batterers: a study of 234 men charged with domestic violence offenses. *Journal of Family Violence*, 2, 81-93
- Roizen, J. (1993). Issues in the epidemiology of alcohol and violence in alcohol and interpersonal violence: Fostering multidisciplinary perspectives. National Institute on Alcohol Abuse and Alcoholism Research Monograph No. 24. Washington, DC: Natl. Institute of Health
- Rubin, A. & Babbie, E. (1997). *Research methods for social work*. California: Wadsworth.
- Schuler, S. R., Hashemi, S. M., Riley, A. P. & Akhter, S. (1996). Credit programs, patriarchy and men's violence against women in rural Bangladesh. *Social Science & Medicine*, 43(12), 1729-1742
- Schuler, S. R., Hashemi, S. M., & Badal, S. H. (1998). Men's violence against

women in rural Bangladesh: undermined or exacerbated by micro-credit programmes? *Development in Practice*, 8(2), 148-157.

- Schmidt, L. & Room, R. (2010). Alcohol and the process of economic development: contributions from ethnographic research. *International Journal of Alcohol and Drug Research*, 1-15
- Shane, B. & Ellsberg, M. (2002). Violence against women: effects on reproductive health. *Outlook*, 20, 1
- Stall, R., & Leigh, B. C. (1994). Understanding the relationship between drug or alcohol use and high risk sexual activity for HIV transmission: Where do we go from here? *Addiction*, 89, 131–134.
- Steele, C. M. & Joseph, R. A. (1990). Alcohol myopia: its prized and dangerous effects. *American Psychologist*, 45, 921-933
- Taylor, M., Dlamini, S.B., Kagoro, H., Jinabhai, C.C. & de Vries, H. (2003). Understanding high school students' risk behaviors to help reduce HIV/AIDS epidemic in KwaZulu-Natal. *Journal of School Health*, 73(3), 97-101.
- Van der Straten, A., King, R., Grinstead, O., Serufilira, A., & Allen, S. (1995). Couple communication, sexual coercion and HIV risk reduction in Kigali, Rwanda. *AIDS*, 9, 935–944.
- West, C. & Zimmerman, D. H. (1987). Doing gender. *Gender and Society*, 1(2), 125-151
- Weinsheimer, R. L., Schermer, C. R., Malcoe, L. H., Balduf, L. M., & Bloomfield, L. A. (2005). Severe intimate partner violence and alcohol use among female trauma patients. *The Journal of Trauma*, 58, 22–29.
- Windle, M. (1997). The trading of sex for money or drugs, sexually transmitted

diseases (STDs), and HIV-related risk behaviors among multi-substance using alcoholic inpatients. *Drug and Alcohol Dependence*, 49, 33–38.

- Women Affairs Department (WAD) (1999). Report on the study on the socio-economic implications of violence against women. Gaborone: Ministry of Labour and Home Affairs.
- World Health Organization (2003). World health report 2003: Shaping the future. Geneva: WHO
- Udo, E. A. (1982). *Who are the Ibibios?* Onitsha: Africana-Fep Publishers

- United Nations Office on Drugs and Crime (2013). *World Drug Report 2013*. New York: UNODC.
- Yarvis, R. M. (1994). Patterns of substance abuse and intoxication among murderers. *Bulletin of the American Academy of Psychiatry and Law*, 22(1), 133-144
- Zablotska, I. B., Gray, R. H., Koeing, M. A. et. al. (2009). Alcohol use, intimate partner violence, sexual coercion and HIV among women age 15-24 years in Rakai, Uganda. *AIDS and Behaviour*, 13, 225-233

ACKNOWLEDGEMENTS

This volume of the African Journal of Drug and Alcohol Studies has been published with financial support from FORUT (Campaign for Development and Solidarity), Norway. The grant has made it possible for us to publish important scientific reports on alcohol and drug use in Africa at no cost to authors and readers all over the world. We are immensely grateful to FORUT for the generous support we have received and look forward to continued collaboration in the dissemination of important scientific information on psychoactive substance use in Africa.

The Editorial Board is also grateful to the many reviewers and others who have contributed in various ways to improving the quality of the papers published in the journal.

AFRICAN JOURNAL OF DRUG & ALCOHOL STUDIES

INSTRUCTIONS TO CONTRIBUTORS

Manuscripts. AJDAS solicits manuscripts on these and other aspects of substance use: epidemiology, prevention. treatment. psychopharmacology. health and socio-economic issues, drug trafficking, and drug law and policy. The Journal is particularly interested in manuscripts that report an association between substance use and other social and health-related problems, e.g., HIV/AIDS, crime and violence, injury, accidents, physical and mental health problems. The journal audience includes researchers, practitioners, policy makers, students and educated members of the public interested in alcohol and drug issues. Hence, whether reporting data from an empirical study or reviewing a particular research issue, authors should have in mind this diverse group of readers.

Preparing manuscripts. Authors are required to prepare manuscripts in accordance with the Publication Manual of the American Psychological Association (5th edition). All components of the manuscript should be double-spaced, including title page, abstract, references, author note, acknowledgement, and appendixes. Authors are encouraged to keep manuscripts as concise as possible, with a length of 15 pages or less, including tables, figures, and references. Unless it is absolutely necessary, tables and figure should not be more than four. Every manuscript must include an abstract containing a maximum of 120 words, typed on a separate page. The full name, address, telephone number and e-mail address of the corresponding author should be shown on the cover page.

Please refer to the Manual for specific instructions on preparing abstracts, figures, matrices, tables, and references. References should be cited in the text by author(s) and dates with multiple references in alphabetical order. Each in-text citation should be listed in the reference section. Here are examples of how articles and books should be referenced:

Journal article:

Abdool, R., Sulliman, F.T., & Dhannoo, M. I. (2006). The injecting drug use and HIV/AIDS nexus in the Republic of Mauritius. *African Journal of Drug and Alcohol Studies*, 5(2), 107-116. Book chapter:

Tumwesigye, N. M., & Kasirye, R. (2005). Gender and the major consequences of alcohol consumption in Uganda. In I. S. Obot & R. Room (eds.), *Alcohol, gender and drinking problems* (pp. 189-208). Geneva: World Health Organization.

Book:

MacAllister, W.B. (2000). *Drug diplomacy in the twentieth century*. London: Routledge.

Website: Include the date of access.

Submission of manuscripts. All manuscripts should be submitted by e-mail to the Editor-in-Chief at iobot@crisanet.org. You can also submit your manuscript to the deputy editor responsible for the region to which you belong.

Cover Letter. Every manuscript must be accompanied by a cover letter stating unequivocally that the manuscript and data have not been published previously or concurrently submitted elsewhere for consideration. In addition, authors must state that the participants in their study have been treated in accordance with ethical standards. In the case of manuscripts with multiple authors, the corresponding/lead author must state categorically that all listed authors contributed in significant ways to the work.

Reprints. The journal does not produce reprints for authors, instead the lead author will receive a copy of the journal in which his or her article appears.

Postal address: USA: *African Journal of Drug and Alcohol Studies*, P. O. Box 4230, University Post Office, Uyo, Nigeria; 10 Sandview Ct, Baltimore, MD 21209, USA.

Subscription information: Request for information on individual or institutional subscription should be sent to the Editor-in-Chief at iobot@crisanet.org.

AFRICAN JOURNAL

of DRUG and ALCOHOL STUDIES

VOLUME 13 NUMBER 1 2014

CONTENTS

Self- and collateral spouse-reported alcohol use in Malawi: Exploring social drinking norms' potential for alcohol prevention
Monitoring outdoor alcohol advertising in developing countries: Findings of a pilot study in five African countries
Perceived discrimination and social identity as adolescents' pathways to early substance use
Drug use patterns and socio-demographic profiles of substance users: Findings from a substance abuse treatment programme in Gaborone, Botswana
Drinking, violence against women and the reproduction of masculinity in Oron, Nigeria