Examining alcohol advertisement violations: Analyses of alcohol billboards in Kampala, Uganda

Monica H. Swahn[1], Alaina Whitton[2], Rogers Kasirye[3] and Katherine Robaina[4]

[1] Wellstar College of Health and Human Services, Kennesaw State University, Kennesaw, GA, USA
[2] School of Public Health, Georgia State University, Atlanta, GA, USA
[3] Uganda Youth Development Link, Kampala, Uganda
[4] Medical and Health Sciences, University of Auckland, Auckland, New Zealand

Abstract

Despite high levels of alcohol use in Uganda, there is a scarcity of research on alcohol marketing, its placement and content. In this field study we evaluated the content of alcohol billboards across Kampala, Uganda using the Alcohol Marketing Assessment Rating Tool (AMART). Of the 27 unique alcohol advertisements evaluated, the nine-member review panel found that 23 contained at least one violation yielding a violation rate of 85%. Given the high number of violations, our recommendation is that future alcohol billboard advertisements within Kampala be reviewed and approved by a governing body for compliance with alcohol advertisement standards.

Introduction

Alcohol use is a significant public health problem globally but is of particular concern in resource poor settings where alcohol policies and regulations are limited (World Health Organization [WHO], 2018). The lack of progress in reducing the prevalence of alcohol use and associated harm has been in part attributed to the limited adoption of the World Health Organization's (2010) Global Strategy to Reduce Harmful Use of Alcohol (Jernigan & Trangenstein, 2020). Alcohol marketing is noted as a particular important concern and is listed as a priority for addressing alcohol as a global health problem (WHO, 2010; WHO, 2017; WHO, 2019).

In Uganda, the prevalence of alcohol use and related harm is high (WHO 2018). Anecdotal reports and preliminary research indicate that aggressive alcohol marketing is pervasive (WHO 2011) and that it exacerbates the high prevalence of alcohol use and related harm, particularly among vulnerable youth in Kampala (Culbreth et al., 2021; Swahn et al., 2013; Swahn et al., 2018; Swahn et al, 2020; Swahn, Culbreth, et al., 2022) and across Sub-Saharan Africa (Jernigan & Babor, 2015) and where prevention efforts are lacking (Swahn, Robow, et al., 2022). However, there is a scarcity of research and strategies for assessing alcohol marketing, its placement and content in Uganda (Swahn, Palmier, et al., 2022). Even with limited data, it is still evident that low and middle-income countries, and

vulnerable populations within, bear an increased burden of disease, injury, death and disability due to increasing alcohol consumption. This issue is exacerbated in settings with limited or nonexistent alcohol-related public health and prevention policies and programs (Jernigan & Trangenstein, 2020) and which is a noted concern across low-resource settings in Africa (Babor, 2018; Ferreira-Borges et al., 2015; Ferreira-Borges et al., 2017; Swahn et al., 2022).

An important and previously largely unaddressed issue in sub-Saharan Africa is the extent and scope of alcohol marketing and whether the advertising on billboards is compliant with the voluntary advertising codes endorsed in 2011 by 10 of the largest multi-national alcohol producers (Babor et al., 2008; 2013; Noel et al., 2018). Please refer to the information provided by the International Alliance for Responsible Drinking (IARD, 2011) and the guiding principles for self-regulation of alcohol marketing.

The objective for the current field study project was to determine the proportion of alcohol billboards in compliance with industry self-regulated marking codes in Kampala, Uganda using the validated Alcohol Marketing and Assessment Rating Tool (AMART; Noel et al., 2018). The findings from this field study will be important for prevention efforts that seek to reduce the potential inappropriate marketing strategies used by the alcohol industry and to develop mitigated measures to prevent marketing violations using strategies that can be scaled up, particularly in low-resource settings.

Field Data Collection Approach

Data collection occurred in May 2018 as part of a course project for a Georgia State University study abroad trip on alcohol and harm in Uganda. Pictures of alcohol billboards were collected by the project team and through crowdsourcing using a Facebook page where submissions of pictures of alcohol advertisements on billboards were incentivized through random drawings and prizes for airtime/mobile money to those submitting the most ads. Instructions for submitting photos to the page specifically stated that (a) photos of alcohol billboards should be taken using a smart phone with the location enabled (to provide the geospatial location); (b) the billboard had to be located within the Kampala district; and (c) the nearest intersection/specific location should be provided with the submission (for verification). After removing duplicates, 27 were deemed to reflect unique alcohol adverts. ArcMap 10.4.1 was used to map the geolocation of the unique advertisements, and some locations were validated using Google Maps 2018 software, when applicable.

In terms of the approach and rating the content of the ads, the AMART (Noel et al., 2018; Babor et al., 2013) was slightly modified. The original rating tool was comprised of nine questions pertaining to the different domains (e.g., encouraging immoderate consumption, appeal to underage youth, associate the beverage with success, displaying illegal activity, targeting at-risk groups). Seven of these questions were to be answered using a Likert scale with five response options ranging from strongly disagree to strongly agree. The last two questions were used to estimate the age of the person(s) in the advertisement, if applicable, and to estimate how many drinks the person(s) may be likely to consume in the situation of the advertisement. We made the following minor modifications of the rating tool to facilitate the scoring and assessment. First, we simply dichotomized the response options to agree or disagree. Second, we dichotomized the responses to the last two questions regarding age to indicate whether or not the person was perceived to be over or under 18 years of age (the legal drinking age in Uganda), and the final question was to estimate whether the person in the advertisement was likely to consume an excessive amount of alcohol (more than four drinks for women and more than five drinks for men). Finally, we added two additional questions to determine whether the advertisement failed to display the minimum legal drinking age (18 years in Uganda) and whether it failed to contain a health warning to be associated with alcohol consumption. With these two additional questions, the project team scored each advertisement on 11 dichotomized criteria using a modified Delphi approach.

Training was facilitated by the lead professor and researcher who used the existing training material previously developed by the collaborator, who also developed the AMART. Following training and an overview of the rating procedures, the alcohol advertisements were evaluated and rated by a nine-member team comprised of one professor and eight undergraduate and graduate students representing several different academic disciplines. The reviewers were mostly females. The team used a modified Delphi approach. At Time 1, each panel member provided an individual rating of the advert. Following a group discussion and disclosure of the overall ratings, members provided feedback-assisted rating at Time 2. This methodology had been developed and used in similar research previously to calibrate responses and ratings from multiple reviewers and perspectives (Noel et al., 2018). The scores from Time 2 were used to determine the violation rate (Noel et al., 2018).

Findings from the Field Data Collection and Advertisement Evaluations

Table 1

AMART Review Criteria and Frequency of Violations Noted across the 27 Alcohol Advertisements Reviewed.

AMART Review Criteria	Frequency of Violations
1. Advertisement shows situations where people are drinking an alcoholic beverage excessively, or otherwise encourages immoderate consumption.	7
2. Advertisement uses symbols, language, music, gestures, or cartoon characters that are associated with or are intended to appeal primarily to persons below legal purchase age.	4
3. Advertisement suggests that drinking leads to an exciting adventurous life.	16
4. Advertisement associates social, professional, mental, educational, athletic or financial success with drinking the alcohol product.	20
5. Advertisement shows or suggests the use of an alcohol product before or during activities requiring sobriety or a high degree of alertness or coordination, such as driving an automobile, operating machinery, boats, working in a hazardous situation, playing sports, etc.	2
6. Advertisement shows illegal activity.	0
7. Advertisement depicts or appears to be addressed to at-risk groups, such as pregnant women, women of childbearing age, people under legal purchase age, college students, ethnic minorities, alcoholics, or other vulnerable groups.	12
8. Advertisement depicts a person perceived to be under the legal drinking age of 18.	0
9. Advertisement depicts person/people consuming more than 4 drinks (for women) or 5 drinks (for men).	4
10. Advertisement fails to show the minimum age requirement (18 years) for consuming alcohol	5
11. Advertisement fails to contain a health warning to be associated with the beverage	15

Of the 27 unique advertisements rated, 23 contained at least one violation. As such, the overall violation rate was 85.2% for our modified AMART with 11 specific criteria (See Table 1). Using the nine original criteria, the overall violation rate was 77.8%. The most commonly observed

violations pertained to Criterion 4 (n = 20; This advertisement associates social, professional, mental, educational, athletic or financial success with drinking the alcohol product); Criterion 3 (n = 16; This advertisement suggests that drinking leads to an exciting adventurous life) and Criterion 7 (n = 12;The advertisement depicts or appears to be addressed to at-risk groups, such as pregnant women, women of childbearing age, people under legal purchase age, college students, ethnic minorities, alcoholics, or other vulnerable groups); see Table 1. These four criteria represented 74% of all the violations noted across all advertisements reviewed. The two advertisements with the most violations, seven each, were related to the FIFA world cup celebration in Russia, sponsored by Nile beer, and a sweepstake for Eagle Beer (See Table 2). The product sponsors listed in Table 2 also comprise a range of local and international brands and manufacturers.

Table 2

Number of AMART Alcohol Advertisement Violations and Specific Criteria Violated for the Advertisements Reviewed by Product Sponsor

	Advertisement Description/Product Sponsor	1 –9 Violations	1–11 Violations	AMART Criteria Violated*
1	Bell Grab Life	4	4	1, 3, 4, 9
2	Bell La Fontaine	0	0	N/A
3	Bell Swangz	4	4	2, 3, 4, 7
4	Bell Welcome	0	0	N/A
5	Bell Zoomed	0	0	N/A
6	Black and White	1	1	4
7	Castle	3	4	3, 4, 7, 11
8	Club Refreshing	0	1	11
9	Eagle Oli	6	7	1, 2, 3, 4, 5, 7, 11
10	Guiness Celebrate	4	6	3, 4, 7, 9, 10, 11
11	Guinesss Made	0	0	N/A
12	Guojia Whiskey	0	2	10, 11
13	Johny Walker	2	3	4, 10
14	Knock Out Gin	2	4	1, 7, 10, 11
15	Nile Drink Smart	1	1	4
16	Nile Creativity	2	3	3, 4, 11
17	Nile Passion	2	3	3, 4, 11
18	Nile Pride	2	3	3, 4, 11
19	Nile Special Passion	4	5	1, 3, 4, 7, 11
20	Nile Fifa	6	7	1, 2, 3, 4, 7, 9, 11
21	Nile New Look	2	3	3, 4, 11
22	Nile Play Passion	4	5	3, 4, 5, 7, 11
23	Pilsner	2	2	4, 7
24	Reddys Vodka	2	4	1, 7, 10, 11
25	Tusker Lite B&W	4	6	2, 3, 4, 7, 10, 11
26	Tusker Lite KNR	4	4	3, 4, 7, 9
27	Tusker Malt	3	3	1, 3, 4
Total		**64**	**85**	

*See Table 1 for specific AMART criteria

As shown in Figure 1, the locations of the alcohol billboards across Kampala were centered around busy intersections and roundabouts (traffic circles).

Reflections on the Approach and Findings

In this study we found that 85.2% of the alcohol billboards in Kampala displayed in May 2018 contained at least one violation of the voluntary advertising codes. Moreover, two of the advertisements contained seven violations each. As such, intervention strategies are needed to address the large number of violations and inappropriate marketing of alcohol in Kampala. This is an emerging area of research that needs further development. Also, while research in the area of determining compliance to alcohol marketing standards are still emerging, a few studies from other settings indicate similar and high rates of violations. For example, the quantitative examination of all unique alcohol advertisement in the Americas and Spain during the 2014 FIFA World Cup tournament indicated that 86.2% of the advertisements included at least one violation (Noel, Babor, Robaina et al., 2017). As such, it seems that alcohol marketing violations are prevalent and violate the content guidelines of self-regulatory codes, potentially exposing vulnerable populations to inappropriate themes (Ferreira-Borges et al., 2017; Noel & Babor, 2016).

Our use of crowdsourcing proved to be a compelling strategy to obtain the advertisements for review, and greatly reduced cost and human resources for data collection. Crowdsourcing has been previously used in tobacco research (Kim et al., 2015) and its applicability across research topics

are rapidly expanding (Gartland et al., 2020; Acquaviva et al., 2020).

Figure 1

Geospatial Locations of Alcohol Billboards across Kampala, May 2018
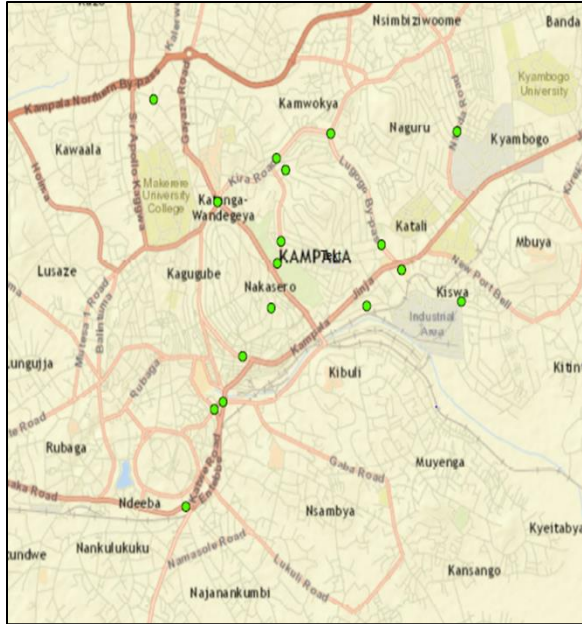
An important lesson learned from the current project was the need for a better and more efficient strategy to analyze and review the advertisements, especially if more advertisements had been submitted on the Facebook page through the crowd sourcing approach. Moreover, the crowdsourcing approach generated interesting social media discussion regarding the influence of alcohol marketing and its content, but was not systematically captured or evaluated. This was something we had not anticipated, but would encourage future research to incorporate this component to add another dimension to the data and perceptions regarding alcohol marketing and its placements. This is a very important area for future research given the high levels of alcohol marketing that takes place on social media (Jernigan, & Rushman, 2013; Room & O'Brien, 2020). Additionally, the geospatial locations of the alcohol advertisements appeared to be near busy intersections and roundabouts (traffic circles) maximizing visual impact and should also be explored in future research. Perhaps recommendations can also be targeted to the specific location where alcohol marketing may be permitted, to reduce its overall adverse impact.

Several potential limitations should be noted when interpreting our findings. Our approach did not determine the proportion of advertisements that may have been missed from our data collection and review, and as such we cannot determine if the reviewed advertisements represented a census of alcohol billboards posted at the time of data collection. However, there is no indication that a substantial number of advertisements were omitted or that the advertisements we reviewed were different than any that we may have missed. Perhaps more important than the overall

violation rate is the number of adverts we reviewed that contained multiple violations. These findings underscore a disregard for alcohol marketing standards by both local and international alcohol manufacturers and need to be addressed in alcohol control and prevention efforts. Moreover, even though the advertisements we evaluated were collected in 2018, we have not personally noted any observable changes in the trends or content of the alcohol advertisements which have been posted more recently. In addition, anecdotal reports seem to indicate that the situation may be worse with larger oversized advertisements. Overall, the crowd sourcing strategy proved to yield a significant number of advertisements in a short period with limited resources. Moreover, many submissions did not include the GIS locations for exact mapping. Future research can modify and enhance the strategies we employed in this field study to strengthen data collection and mapping to inform alcohol policy strategies in low-resource settings. We highly recommend that this project be replicated with more recent data and that more deliberate efforts are made to determine the census of alcohol billboards displayed at that time.

Conclusions

The alcohol industry appears to inadequately self-regulate its own marketing standards. This is a concern raised by many who have evaluated its practices (Noel, Babor, & Robaina, 2017; Noel, Lazzarini, et al., 2017) We recommend that prior to being displayed for the public, alcohol advertisements placed on billboards within Kampala should be reviewed and approved by a governing body for content and compliance with the alcohol advertisement standards. This lack of review process appears to be a critical gap, given the low industry compliance with the marketing codes demonstrated in our research. Our research demonstrates that most of the violations pertained to only four criteria. These should be prioritized in the proposed review process. If these recommendations are implemented, it would likely reduce the overall environmental exposure to alcohol advertisements that violate the industry codes in Uganda.

Acknowledgements

We are very grateful for the study abroad project team members who collected and analyzed the data used in this manuscript and to the community members who participated in the crowd sourcing of the adverts.

References

Acquaviva, K. D., Mugele, J., Abadilla, N., Adamson, T., Bernstein, S. L., Bhayani, R. K., Büchi, A. E., Burbage, D., Carroll, C. L., Davis, S. P., Dhawan, N., Eaton, A., English, K., Grier, J. T., Gurney, M. K., Hahn, E. S., Haq, H., Huang, B., Jain, S., Jun, J., … Trudell, A. M. (2020). Documenting social media engagement as scholarship: A new model for assessing academic accomplishment for the health professions. *Journal of Medical Internet Research*, *22*(12), e25070. https://doi.org/10.2196/25070

Babor T. F. (2018). Out of Africa: Three threads tying the alcohol industry to an emerging alcohol

epidemic. *Journal of Studies on Alcohol and Drugs*, *79*(2), 157–158.

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. https://doi.org/10.1111/acer.12146

Babor, T. F., Xuan, Z., & Proctor, D. (2008). Reliability of a rating procedure to monitor industry self-regulation codes governing alcohol advertising content. Journal of studies on alcohol and drugs, 69(2), 235–242. https://doi.org/10.15288/jsad.2008.69.235

Culbreth, R., Masyn, K. E., Swahn, M. H., Self-Brown, S., & Kasirye, R. (2021). The interrelationships of child maltreatment, alcohol use, and suicidal ideation among youth living in the slums of Kampala, Uganda. *Child Abuse & Neglect*, *112*, 104904. https://doi.org/10.1016/j.chiabu.2020.104904

Ferreira-Borges, C., Esser, M. B., Dias, S., Babor, T., & Parry, C. D. (2015). Alcohol control policies in 46 African countries: Opportunities for improvement. *Alcohol and Alcoholism*, *50*(4), 470–476. https://doi.org/10.1093/alcalc/agv036

Ferreira-Borges, C., Parry, C. D., & Babor, T. F. (2017). Harmful use of alcohol: A shadow over Sub-Saharan africa in need of workable solutions. *International journal of Environmental Research and Public Health*, *14*(4), 346. https://doi.org/10.3390/ijerph14040346

Gartland, A., Bate, A., Painter, J. L., Casperson, T. A., & Powell, G. E. (2020). Developing Crowdsourced Training Data Sets for Pharmacovigilance Intelligent Automation. *Drug Safety*, 10.1007/s40264-020-01028-w. Advance online publication. https://doi.org/10.1007/s40264-020-01028-w

International Alliance for Responsible Drinking (IARD). (2011). *Guiding principles: Self-regulation of marketing communications for beverage alcohol.* http://www.iard.org/wp-content/uploads/2016/01/Guiding-Principles.pdf

Jernigan, D. H., & Babor, T. F. (2015). The concentration of the global alcohol industry and its penetration in the African region. *Addiction*, *110*(4), 551–560. https://doi.org/10.1111/add.12468

Jernigan, D. H. & Rushman, A. E. (2013). Measuring youth exposure to alcohol marketing on social networking sites: Challenges and prospects. *Journal of Public Health Policy, 35*(1), 91–104. https://doi.org/10.1057/jphp.2013.45

Jernigan, D. H., & Trangenstein, P. J. (2020). What's next for WHO's global strategy to reduce the harmful use of alcohol? *Bulletin of the World Health Organization, 98*(3), 222-223. doi:10.2471/blt.19.241737

Kim, A. E., Lieberman, A. J., & Dench, D. (2015). Crowdsourcing data collection of the retail tobacco environment: Case study comparing data from crowdsourced workers to trained data collectors. *Tobacco Control*, *24*(e1), e6–e9. https://doi.org/10.1136/tobaccocontrol-2013-051298

Noel, J. K. & Babor, T. F. (2016). Does industry self-regulation protect young people from exposure to alcohol marketing? A review of compliance and complaint studies. *Addiction, 112*(S1), 51–56. https://doi.org/10.1111/add.13432

Noel, J. K., Babor, T. F., & Robaina, K. (2017). Industry self-regulation of alcohol marketing: A systematic review of content and exposure research. *Addiction*, *112 Suppl 1*, 28–50. https://doi.org/10.1111/add.13410

Noel, J. K., Babor, T. F., Robaina, K., Feulner, M., Vendrame, A., & Monteiro, M. (2017). Alcohol marketing in the Americas and Spain during the 2014 FIFA World Cup Tournament. *Addiction*, *112 Suppl 1*, 64–73. https://doi.org/10.1111/add.13487

Noel, J., Lazzarini, Z., Robaina, K., & Vendrame, A. (2017). Alcohol industry self-regulation: Who is it really protecting? *Addiction*, *112 Suppl 1*, 57–63. https://doi.org/10.1111/add.13433

Noel, J. K., Babor, T. F., & Robaina, K. (2018). Reliability and validity of the Alcohol Marketing Assessment Rating Tool (AMART). *Nordisk alkohol- & narkotikatidskrift : NAT [Nordic Studies on Alcohol and Drugs]*, *35*(2), 108–117. https://doi.org/10.1177/1455072518758518

Room, R., & O'Brien, P. (2021). Alcohol marketing and social media: A challenge for public health control. *Drug and Alcohol Review, 40*(3), 420–422. https://doi.org/https://doi.org/10.1111/dar.13160

Swahn, M. H., Culbreth, R., Fodeman, A., Cottrell-Daniels, C., Tumwesigye, N. M., Jernigan, D. H., Kasirye, R., & Obot, I. (2022). Heavy drinking and problem drinking among youth in Uganda: A structural equation model of alcohol marketing, advertisement perceptions and social norms. *Drug and Alcohol Review*, *41*(6), 1444–1456. https://doi.org/10.1111/dar.13497

Swahn, M. H., Culbreth, R., Salazar, L. F., Tumwesigye, N. M., Jernigan, D. H., Kasirye, R., & Obot, I. S. (2020). The prevalence and context of alcohol use, problem drinking and alcohol-related harm among youth living in the slums of Kampala, Uganda. *International Journal of Environmental Research and Public Health*, *17*(7), 2451. https://doi.org/10.3390/ijerph17072451

Swahn, M. H., Culbreth, R., Tumwesigye, N. M., Topalli, V., Wright, E., & Kasirye, R. (2018). Problem drinking, alcohol-related violence, and homelessness among youth living in the slums of Kampala, Uganda. *International Journal of Environmental Research and Public Health*, *15*(6), 1061. https://doi.org/10.3390/ijerph15061061

Swahn, M. H., Palmier, J. B., May, A., Dai, D., Braunstein, S., & Kasirye, R. (2022). Features of alcohol advertisements across five urban slums in Kampala, Uganda: Pilot testing a container-based approach. *BMC Public Health*, *22*(1), 915. https://doi.org/10.1186/s12889-022-13350-2

Swahn, M., Palmier, J., & Kasirye, R. (2013). Alcohol exposures, alcohol marketing, and their associations with problem drinking and drunkenness among youth living in the slums of Kampala, Uganda. *ISRN Public Health, 2013*. https://doi.org/10.1155/2013/948675

Swahn, M. H., Robow, Z., Balenger, A., Staton, C. A., Kasirye, R., Francis, J. M., Komba, S., & Siema, P. (2022). Preventing alcohol-related harm in East Africa: Stakeholder perceptions of readiness across five countries. *International Journal of Environmental*

Research and Public Health, *19*(22), 14979. https://doi.org/10.3390/ijerph192214979

World Health Organization. (2019). *The SAFER initiative: A world free from alcohol-related harm.* https://www.who.int/initiatives/SAFER

World Health Organization. (2018). *Global status report on alcohol and health 2018*: World Health Organization. https://www.who.int/publications/i/item/978924156563 9

World Health Organization (2011). *Monitoring alcohol marketing in Africa: MAMPA Project.* https://www.afro.who.int/publications/monitoring-alcohol-marketing-africa-mampa-project

World Health Organization. (2010). *Global strategy to reduce the harmful use of alcohol.* https://apps.who.int/iris/bitstream/handle/10665/44395/ 9789241599931_eng.pdf?sequence=1