A scoping review of the potential for no- and low-alcoholic beverages to mitigate alcohol harm in Kenya

Authors

*Alex Okaru [1,2], Samuel Makini [3] and Dirk W. Lachenmeier [4]

1. Faculty of Health Sciences, University of Nairobi, Nairobi, Kenya

2. Drug Analysis & Research Unit (DARU), University of Nairobi, Kenya

3. National Authority for the Campaign Against Alcohol and Drug Abuse, Nairobi, Kenya

4. Chemisches und Veterinäruntersuchungsamt (CVUA) Karlsruhe, Weissenburger Karlsruhe, Germany

Corresponding Author

Alex Okaru

1. Faculty of Health Sciences, University of Nairobi, Nairobi, Kenya

2. Drug Analysis & Research Unit (DARU), University of Nairobi, Kenya

E-mail: alex.okaru@gmail.com

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ABSTRACT

The high burden of disease associated with alcohol consumption in Kenya, exacerbated by heavy episodic and unrecorded drinking, warrants exploration of harm reduction strategies. As the no- and low-alcohol (NoLo) beverage market grows globally, its public health implications in low-and middle-income countries like Kenya are poorly understood. Using a scoping review based on the Joanna Briggs Institute (JBI) methodology, a systematic search of PubMed, Scopus, Web of Science, and African Journals Online supplemented by grey literature was conducted using the following keywords: non-alcoholic, low-alcohol, Kenya, alcohol harm reduction, and public health policy. Four themes emerged from the scoping review. First, the NoLo alcohol market in Kenya is emerging and rapidly growing, and international alcohol manufacturers are strategically targeting it to capture urban and health-conscious consumers. Second, the regulatory gap on NoLo alcohol products with respect to definition and marketing regulation, as well as fiscal regulation, exists. Third, there is a lack of local data on the population level effect of NoLo alcohol use and harm reduction among high-risk groups. Fourth, the use of NoLo products as a corporate social responsibility initiative by manufacturers may compromise other regulatory initiatives

with respect to alcohol. However, the benefit of NoLo alcohol beverages for alcohol harm reduction in Kenya depends on the development of a strong, public health-oriented regulatory framework that is not easily manipulated by industry, that clearly defines products, and that guides marketing. Given these findings, it is suggested that without proactive and evidence-informed policy action, the NoLo alcohol market may be nothing more than a market expansion strategy for the alcohol industry, rather than a public health opportunity to lower alcohol related mortality and morbidity.

INTRODUCTION

Alcohol is one of the leading modifiable risk factors for the global burden of disease (GBD 2020 Alcohol Collaborators, 2022)suggesting that the overall risk depends, in part, on background disease rates, which vary by region, age, sex, and year.\nMETHODS: For this analysis, we constructed burden-weighted dose-response relative risk curves across 22 health outcomes to estimate the theoretical minimum risk exposure level (TMREL, with low- and middle-income countries (LMICs) such as Kenya disproportionately impacted by alcohol (Bartram et al., 2017; WHO, 2024). Kenya has a high rate of per capita alcohol consumption, which is exacerbated by heavy episodic drinking, and is associated with numerous social, economic, and health effects (WHO, 2024). Cognizant of alcohol attributable effects, the Kenyan government responded by passing the Alcohol Control Act (2010) (Government of Kenya, 2010), which has provisions for control of manufacture, sale, consumption, distribution and promotion of alcoholic drinks in Kenya. However, this law has been hampered by weak enforcement, limited resources, and a large unrecorded alcohol market, which is estimated at 0.6 liters of pure alcohol per person for the population aged 15 and over (Kipchumba, 2019; Okaru, Abuga, Kibwage, Hausler, et al., 2017; Okaru, Abuga, Kibwage, & Lachenmeier, 2017; WHO, 2024)2017; WHO, 2024. Unrecorded alcohol products often expose consumers to toxic substances. The implementation hurdles of this Act underscore the need for novel, complementary harm reduction strategies.

At the same time, the global demand for no- and low-alcoholic drinks (those with less than 0.5 per cent alcohol by volume (ABV)) has increased, as consumers' health and well-being have become more important and non-alcoholic drinks are seen as a safe alternative to alcohol (Waehning & Wells, 2024). Supporters of no-alcoholic beverages claim that they are a safer alternative to regular alcohol products and can be used to moderate consumption, encourage abstinence, and avoid consumption of high alcohol content products in social functions (Nicholls, 2023; WHO, 2023)further research is required to underpin policy and explore the potential for NoLos to ease – or exacerbate – alcohol-related harm.\nMethods\nThis paper draws on original primary research on NoLo marketing and consumption in

the UK; analysis of two NoLo marketing campaigns and semi-structured interviews with both drinkers and non-drinkers who consume NoLos.\nFindings and discussion\nAddition marketing was identified in the promotion of NoLo products, encouraging consumers to incorporate NoLo consumption into new spatial and temporal contexts on top of their typical weekly drinking patterns. However, there was resistance towards these practices from consumers, who stressed they were more likely to drink NoLos in place of alcohol and incorporate them into their existing drinking routines.\nConclusion\nThis paper expands a currently very limited evidence base and contributes directly to ongoing debates around 'addition' versus 'substitution' (i.e. whether NoLo products are being used on top of or in place of alcohol. However, this view is challenged by the fact that NoLo alcohol drinks may in be a strategic diversification for the commercial alcohol producers, allowing them to circumvent marketing regulations, to develop brand loyalty among the younger generations, and to normalize the idea of drinking as a way of life (Nicholls 2023; WHO 2023).

It is not yet clear whether this debate will be transferred to Kenya, with its different socio-economic stratification, high levels of undeclared alcohol consumption and specific regulatory problems. The objective of this scoping review is to systematically map literature and evidence on no-longer-alcoholic beverages in Kenya, synthesize information on the market and regulatory landscape and potential impact on public health, and identify gaps for future research and evidence-based policy.

METHODOLOGY

This review was conducted following the Joanna Briggs Institute (JBI) methodology for scoping reviews (Peters et al., 2020). The protocol outlined the objectives, inclusion criteria and search strategy *a priori*.

2.1. Eligibility Criteria

The review considered literature focusing on the Kenyan context related to the concept of NoLo beverages. This included studies, reports, and analyses concerning their production, marketing, regulation, consumption, and perceived or measured public health impact.

2.2. Information Sources and Search Strategy

A comprehensive three-step search strategy was employed in September 2025. First, initial limited searches in PubMed and Google Scholar identified key keywords and MeSH terms. Second, searches were conducted across electronic databases (PubMed, Scopus, Web of Science, African Journals Online) using a structured search string: (`'"non-alcoholic"'` OR `'"low-alcohol"'` OR `'"alcohol-free"'` OR `'"zero alcohol"'`) AND (`'"Kenya"'`) AND (`'"beer"'` OR `'"beverage"'` OR `'"public health"'` OR `'"policy"'`). Third, reference lists of included articles and key grey literature sources such as WHO reports, Kenyan Ministry of Health documents, industry reports were hand-searched.

2.3. Selection and Synthesis of Evidence

One hundred and forty-eight citations were screened by title and abstract, followed by a full-text review for final inclusion. Data from selected sources were captured using a standardized template to capture bibliographic details, source type, and key findings (Figure 1). Given the heterogeneity of the evidence, a narrative thematic synthesis was performed to identify, analyze and report recurring themes across the literature.
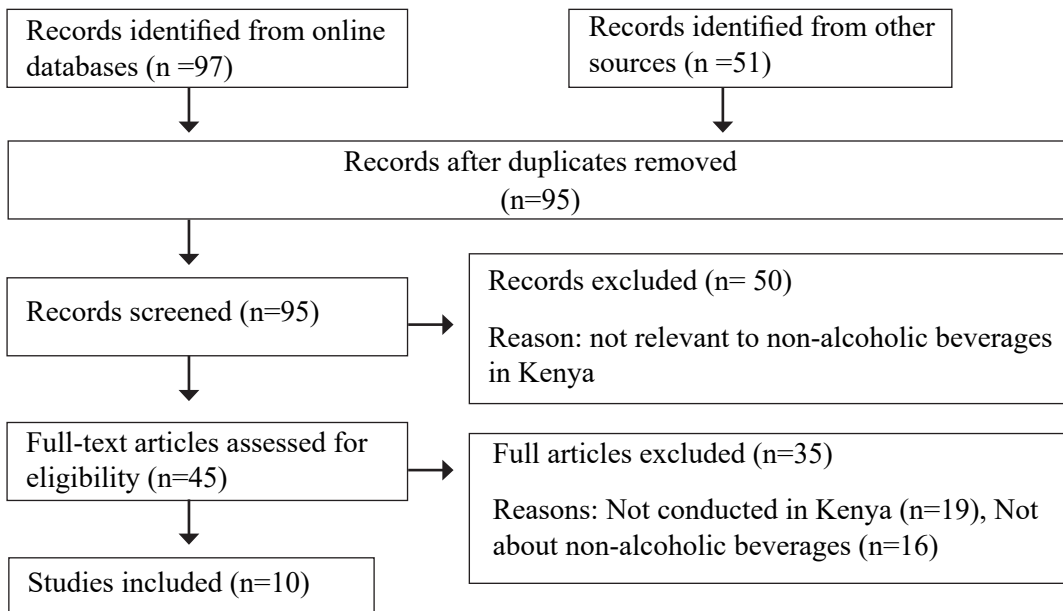
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Figure 1. Criteria for selection of studies

RESULTS

This scoping review identified a small literature on NoLo alcoholic beverages in Kenya, which can be grouped into four main thematic areas: (1) Market evolution and business strategies, (2) Regulatory vacuum and impact on public health, (3) Evidence gaps and impact on public health, and (4) NoLo alcohol as a commercial driver of health. The results are summarized below.

3.1. Theme 1: Market Evolution and Corporate Strategy

The Kenyan NoLo alcohol market is in an early stage of rapid commercialization in which commercial alcohol producers have significant power, and the marketing emphasizes the "responsible drinking," "moderation," and "wellness" frames that target a growing urban middle class, aligning with the corporate strategy of commercial alcohol producers in other markets around the world to use NoLo lines to build brand equity in a shifting consumer landscape (Deng & Messinger, 2022; Thoma & Williamms, 2013). The evidence from

available sources suggests that NoLo alcohol products in Kenya are not designed for a high-risk drinker of illicit alcohol, but for a socio-economically advantaged segment that is considering premium lifestyle choices. This raises equity concerns about the availability of harm reduction tools in different strata of society.

3.2. Theme 2: The Regulatory Vacuum and Its Public Health Implications

A key and consistent finding from the policy analyses is that Kenya does not have a specific legal framework for non-alcoholic drinks (Okaru & Lachenmeier, 2022)2022. This regulatory vacuum is creating multiple risks to public health. Firstly, the ambiguity of the definition resulting from the lack of a legal distinction between alcohol-free products (e.g. <0.5% ABV) and low-alcohol products (e.g. 0.5-1.2% ABV.) may mislead consumers who are abstaining for health, religious or addiction reasons, as has been reported in international studies (Kersbergen et al., 2025; Okaru & Lachenmeier, 2022)2022. Second, there are marketing gaps, since without specific restrictions, NoLo alcohol products may be advertised on platforms normally reserved for alcoholic beverages, such as television, sports events, and social media. These risks normalizing alcohol brand imagery among young people, and potentially acting as a gateway, similar to tactics used in other countries in the tobacco and alcohol sectors (Bury et al., 2024; Dumbili et al., 2025)but also a causal link between alcohol marketing and drinking among young people. Therefore, novel alcohol marketing strategies should be scrutinised, particularly where children are exposed. This includes marketing for zero-alcohol products (ZAP. Finally, the incoherence of fiscal policy is evident, as non-alcoholic drinks are usually taxed as soft drinks, which creates a price gap that could encourage switching. However, without strategic public health guidelines, the industry could use this to increase overall sales volumes without net reduction of harm at the population level (Burton et al., 2024; Okaru & Lachenmeier, 2022)2022.

3.3. Theme 3: The Evidence Gap on Public Health Impact

The gap identified in this review is the complete absence of any primary empirical research carried out in Kenya assessing the impact of non-alcoholic beverages on public health. Although the literature is mixed, some studies show a substitution effect and others show a dual use or no net reduction in alcohol consumption (Miller et al., 2022; Segal & Stockwell, 2009). This does not mean that the findings can be directly applied to the situation in Kenya. The country is unique in the prevalence of artisanal alcohol consumption (chang'aa, busaa, muratina, etc.).) that are often cheaper than the regulated products (Mkuu et al., 2019; Okaru, Abuga, Kibwage, Hausler, et al., 2017). It is not at all known whether the premium-priced NoLo alcohol product has any attraction or usefulness as a substitute for consumers of illegal alcohol. The potential of NoLo alcoholic drinks to reduce harm is therefore currently speculative and not backed up by evidence at the local level.

3.4. Theme 4: NoLo alcoholic beverages as a Commercial Determinant of Health

The alcohol industry is increasingly being framed through the lens of commercial determinants of health (Petticrew et al., 2025). In this context, commercial alcohol producers in Kenya have expanded their NoLo alcohol portfolio as a proactive strategy in the face of two threats: the rising tide of health and wellness and the potential for future tightening of the law. This way, commercial alcohol producers can play a role in public health by participating in Responsible Drinking campaigns for their own non-alcoholic products, thereby establishing goodwill and securing a seat at the policy table (a process called corporate capture) (Mialon & McCambridge, 2018), which risks taking attention and resistance away from and against more effective, evidence-based, population-level policies such as increased taxes or comprehensive marketing bans. The most notable gap in this review is the absence of any primary empirical research in Kenya.

DISCUSSION

This scoping review summarizes the current state of knowledge on NoLo alcoholic beverages in Kenya and reveals a sector characterized by rapid commercial activity, set against a background of regulatory lacuna and a lack of independent public health evidence. The findings suggest that the development of the NoLo alcohol market is shaped more by corporate strategies than by public health objectives. Kenya's policymakers can learn from other jurisdictions in setting a legally binding consumer protection standard. For example, in Europe, there are differences between the terms 'zero alcohol' (<0.04 % of alcohol), 'no alcohol' (<0.5 % of alcohol) or 'low alcohol' (<1.2 % of alcohol) or 'low alcohol' (30 % of the same product) (Okaru & Lachenmeier, 2022)2022. In addition, NoLo products must be clearly included in marketing codes for alcoholic beverages, and fiscal policies should be assessed to ensure that a price differential (i.e., lower pricing for NoLo alcohol products) is part of a comprehensive strategy and not an unintended subsidy for commercial alcohol producers (Malawige et al., 2025).

According to the evidence presented, major policy implications are:

1. Clarify the legal definition of NoLo alcoholic drinks (e.g., determine what is considered alcohol free and what is considered low-alcohol) to remove ambiguity and prevent consumer confusion.
2. Apply current alcohol marketing restrictions to NoLo alcohol products to avoid loopholes that permit alcohol brands to target youth through non-alcoholic products.
3. Design differential taxation/pricing for NoLo alcohol products carefully: lower taxes and prices for NoLo alcoholic beverages can drive substitution, but these fiscal measures should not effectively subsidize alcohol companies or increase overall alcohol consumption.

4. Restrict alcohol industry involvement in NoLo initiatives by ensuring public health agencies lead NoLo alcohol -related harm reduction efforts and guard against corporate capture of policy-making processes.

There is a major gap in local empirical research, and future studies should focus on how availability of NoLo affects alcohol use and harm in Kenya (including recorded and unrecorded [including illicit and artisanal] alcohol consumption) as well as consumer perceptions, acceptability, and barriers to NoLo alcohol use by diverse groups, especially heavy drinkers and those consuming illicit alcohol, and substitution of NoLo products for traditional alcoholic beverages in high risk-populations.

There is some preliminary evidence that NoLo alcoholic products may help some high-risk drinkers to reduce their consumption and that, therefore, social and motivational factors may be important in increasing their use (Davies et al., 2025). Early evidence also suggests that no-alcohol alternatives may be less effective in helping heavy drinkers who drink for recreational (intoxication) reasons, and that they may be more likely to replace regular alcohol with no-alcohol alternatives (Davies et al., 2025). Understanding these motivational differences and other contextual factors will be essential in informing future harm reduction strategies. Finally, the Kenyan public health community should engage in the debate on NoLo alcohol to raise awareness of its commercial determinants of health and be careful when engaging with commercial alcohol producers to avoid the risk of corporate capture.

LIMITATIONS

Several limitations exist with this review: it is heavily reliant on grey literature and media reports, as there were few peer-reviewed studies related to NoLo alcohol products in Kenya, and few studies confirming the alcoholic strength of NoLo products, and as a scoping review, it did not critically appraise the quality of individual sources. However, this study provides a comprehensive map of the current landscape to direct future primary research.

CONCLUSION

The review underscores the need for clear and context-specific definitions of NoLo alcoholic beverages, and while some of the literature includes proposals for distinctions between zero alcohol, alcohol-free, low-alcohol, and reduced-alcohol products, Kenyan regulators should be cautious about adopting these categories wholesale and should instead adapt them to suit local patterns of consumption, socioeconomic status, and the risks of consumer confusion, especially among populations seeking abstention for health, religious, or recovery-related reasons.

These findings highlight that the emerging NoLo alcohol products market in Kenya, with-out clear thresholds for alcohol content and consistent labelling requirements, risks blur-

ring important boundaries between alcoholic and non-alcoholic products, which could be used to normalize alcohol branding in new settings or undermine existing control measures. Consequently, there is a need for a clear classification system adapted to Kenya's regulatory and public health landscape, which informs enforcement and taxation while supporting informed consumer choice and protecting vulnerable groups.

Although existing models, such as the definitions put forth by Okaru and Lachenmeier, provide a good benchmark, a more targeted response is needed in the Kenyan context (Okaru & Lachenmeier, 2022)2022. The regulation of NoLo alcohol products should focus on clear labelling, prohibition of misleading health claims, and preventing NoLo alcohol products from becoming a loophole for alcohol marketing, which would turn the NoLo alcohol products category into an unregulated commercial extension.

Conflict of Interest: The authors declare no conflict of interest.

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