A Readiness Assessment for the Prevention of Alcohol-Related Harm in West Africa: Stakeholder Perceptions from 7 Countries

Monica H. Swahn, Adelaide Balenger, Zakaria Robow, Franklin Umenze, Emeka W. Dumbili & Isidore Obot

Alcohol Policy 19 Arlington, VA Sept. 14, 2022



As required by the Alcohol Policy 19 Conference, I/we have signed a disclosure statement and note the following conflict(s) of interest:

NONE





Project Initiation

Launched collaboration with the West Africa Alcohol Policy Alliance at the Global Alcohol Policy Conference in Dublin (March,



The Vast Continent of Africa

• Population: 1.3 Billion

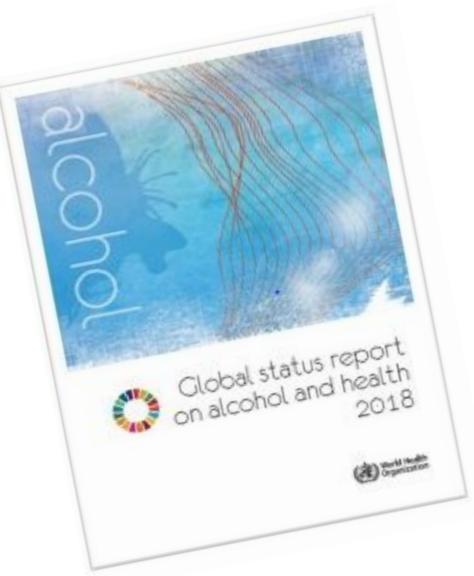
• Countries: 54+

• Languages: 1,500-2,000

• 20% of earth's land area



Burden of Alcohol in Global Context

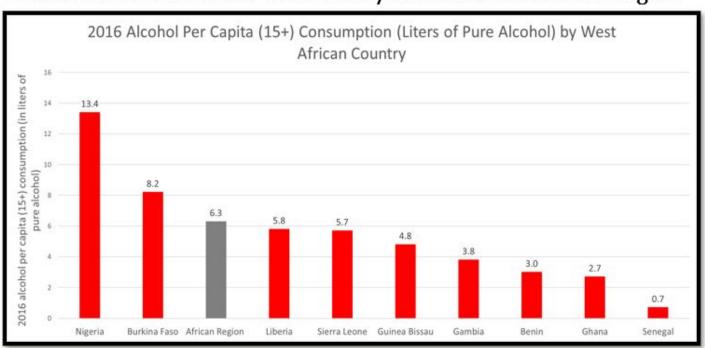


- Worldwide, 3 million deaths every year result from harmful use of alcohol, this represent 5.3 % of all deaths.
- The harmful use of alcohol is a causal factor in more than 200 disease and injury conditions.
- Best Buys for Prevention is to:
 - Increase Price
 - Reduce Availability
 - Reduce Access
 - Reduce Marketing



Background: WHO Global Status Report on Alcohol & Health

Prevalence of alcohol use varies widely across the West African region

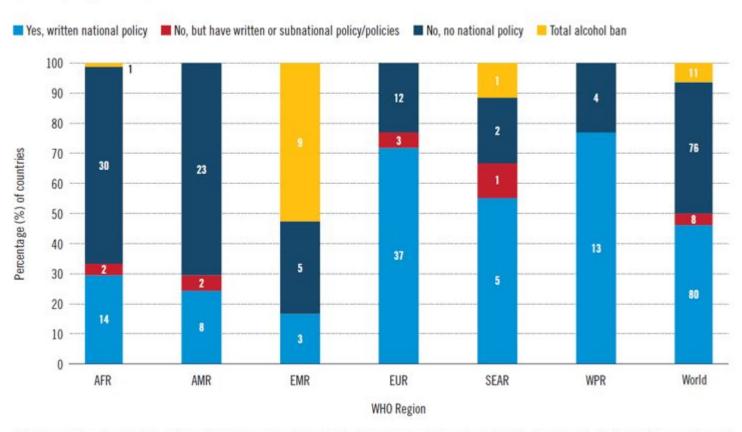


Data source: World Health Organization. (2018). Global status report on alcohol and health 2018. https://apps.who.int/iris/rest/bitstreams/1151838/retrieve



Figure 5.1 Presence of a written national alcohol policy by WHO region and percentage (in %) of countries, 2016

(n = 175 reporting countries)



Note: The numbers in each coloured bar indicate the number of countries in that category, whereas the length of each coloured bar indicates the percentage of countries in the category.



Alcohol Problem in West Africa

- Alcohol is commonly used among youth
- Alcohol is poorly regulated
- Alcohol legal drinking age of 18 is NOT enforced
- Alcohol is heavily promoted to youth
- Alcohol is cheaper than water
- Alcohol fuels violence, injuries, HIV/AIDS...

A Significant Public Health Concern compounded by a self-regulated alcohol industry!



We Could Not Find any Tools Available for Addressing Readiness to Address Alcohol-Related Harm

- Research on alcohol-related harm, harm reduction initiatives, and evaluated alcohol interventions are largely missing in the literature across sub-Saharan Africa (Francis, Cook, Morojele, & Swahn, 2020).
- There are no tools that we know of, that have been employed systematically to assess the strengths and weaknesses for the readiness to address alcohol-related harm in this region (or any region), representing a critical barrier to progress for both practice and policy.
- Given recent research highlighting West Africa as the region within Sub-Saharan Africa with the highest number of age-standardized alcohol-attributable deaths (Morojele et al., 2021), development of such a tool is an urgent priority for alcohol research, capacity building, and policy development, particularly in West Africa.



- In this study, we modified the Readiness Assessment for the Prevention of Child Maltreatment (RAP-CM) tool developed by the WHO (WHO, 2013) to be used in the Readiness Assessment for the Prevention of Alcohol-Related Harm (RAP-ARH) in low-resource settings.
- The RAP-CM has been implemented successfully in many low- and middle-income countries (e.g., the Middle East, Brazil, Macedonia, Malaysia, Kenya, and South Africa) (Al Eissa et al., 2019; Al Saadoon, Al Numani, Saleheen, Almuneef, & Al-Eissa, 2020; Alkhawari et al., 2020; Almuneef et al., 2014; Shanley et al., 2021; World Health Organization n.d.-a).
- This tool was developed as a method for assessing how "ready" a country, region, or community may be to implement prevention programs on a larger scale (WHO, 2013).
- It consists of a 10-dimensional model of readiness and incorporates stakeholders' attitudes, perceptions, and knowledge of child maltreatment, the availability of data on child maltreatment, the willingness to take action to address child maltreatment, and the legal, policy, human, and technical resources available to prevent child maltreatment (WHO, 2013).

READINESS ASSESSMENT FOR THE PREVENTION OF CHILD MALTREATMENT

RAP-CM

SHORT VERSION - Questionnaire

A questionnaire for assessing the readiness of countries, provinces/states/districts, and communities to implement evidence-based child maltreatment prevention programmes on a large scale



Available:

https://cdn.who.int/media/docs/default-source/documents/child-maltreatment/rap-cm-short-questionnaire.pdf?sfvrsn=b8bb2a05_2



Methods (1/2)

- A brief cross-sectional online survey was conducted with stakeholders engaged in the prevention of alcohol-related harm, outreach, and policy development in collaboration with the West Africa Alcohol Policy Alliance (WAAPA) during August and September of 2020.
- The project was titled the <u>West African Alcohol Policy Alliance Capacity Assessment Survey (WAAPACAS)</u> (Balenger et al., 2021).
- Available in 3 languages: English, French & Portuguese
- Shared with organizations in 9 countries:
 - Benin (0)
 - Burkina Faso (1)
 - Gambia (17)
 - Ghana (13)
 - Guinea Bissau (0)
 - Liberia (16)
 - Nigeria (31)
 - Senegal (8)
 - Sierra Leone (33)
- Overall, we had 140 usable responses







Methods 2/2

- The goals of the online survey were to assess:
 - the stakeholders' readiness to assess alcohol-related harm,
 - their organizational structure,
 - · their operational and strategic priorities,
 - target population,
 - perceptions of best practices and alcohol-related concerns in their local communities,
 - · familiarity with WHO SAFER initiative, and
 - research capacity needs.
- We used a snowball participant recruitment strategy where survey invitations were distributed to those affiliated with WAAPA via email and on social media platforms (i.e., WhatsApp and Facebook) to complete the anonymous Qualtrics online survey.
- Participants did not receive any compensation for taking the survey, and participants were free to invite others.
- Among the 140 participants in the survey, most participants worked at either NGOs (56%) or CBOs (24%).
- Because of the survey distribution approach, a response rate cannot be computed.
- The survey was deemed exempt and approved by the Georgia State University Institutional Review Board (H21075).



Adjustments & Scoring of the RAP-ARH

- The research team closely reviewed all the survey questions in the RAP-CM and replaced any term reflecting child maltreatment with "alcohol-related harm" and made minor editorial changes as needed to create the Readiness Assessment for the Prevention of Alcohol-Related Harm (RAP-ARH).
- We made a few modifications to the formatting of the response options to facilitate the online survey distribution. The original RAP-CM short form tool is comprised of 19 survey questions, 14 of which are presented with categorical response options, two with open-ended "write- in "responses, and three where participants are encouraged to write in and list names of programs, names of institutions, and specific partner- ships.
- As used with the RAP-CM scoring, our approach was divided into a 10-dimension model; 1) attitudes toward alcohol-related harm prevention, 2) knowledge of alcohol- related harm prevention, 3) scientific data on alcohol-related harm prevention, 4) current programs and evaluation, 5) legislation, mandates, and policies; 6) will to address the problem, 7) institutional links and resources, 8) material resources; 9) human and technical resources, 10) informal social resources (non-institutional) (WHO, 2013; WHO n.d.-b).



Results

- We examined the responses in aggregate (N = 140) and disaggregated by country for the seven countries that had at least five survey responses;
 - Sierra Leone (N = 33); Nigeria (N = 32); Gambia (N = 17); Liberia (N = 16); Ghana (N = 13); Senegal (N = 12); Burkina Faso (N = 8).
- The overall readiness score for West Africa was 45.0% (ranging from 42.9% in Liberia to 52.7% in Senegal).
- Of the 10 dimensions (D1-D10), ranging in scores from 0 to 10, the highest score in this region pertained to D2: knowledge of alcohol-related harm prevention (8.4) and D5: legislation, mandates and policies (6.7).
- With respect to legislation, mandates and policies, 74.4% of participants across West Africa indicated that yes, there are governmental and non- governmental agencies officially mandated to address alcohol-related harm.
- However, with respect to whether an official policy that specifically address alcohol-related harm, only 56.8% of participants said yes.
- The lowest domain scores were observed for D9: Human and technical resources (2.5); D1: Attitudes toward alcohol-related harm prevention (2.7); and D6: The will to address the problem (2.9).
- Regarding attitudes toward alcohol-related harm prevention, about half of participants (50%) indicated that alcohol-related harm prevention was a low priority in their country, and 69.6% indicated that the measures taken so far to prevent alcohol-related harm in their country had been inadequate.
- With respect to the will to address alcohol-related harm, more than half of the participants 54.5% said no to the question inquiring if there are political leaders who express strong commitment to the issue of alcohol-related harm prevention and are taking effective measures to address the problem. Additionally, 57% indicated that communication regarding alcohol-related harm prevention had been weak in their country.



Discussion

- In this study, we sought to determine the readiness for preventing alcohol-related harm in West Africa by modifying an existing tool that has been developed by the WHO and used to assess readiness for the prevention of child maltreatment (RAP-CM) in low- and middle-income countries and communities.
- Our findings, based on the modified tool we refer to as the RAP-ARH, demonstrate a high perceived knowledge of alcohol-related harm and strong legislative mandates and policies across West Africa, although variations between countries were noted.
- Our findings also noted weaknesses in several areas that are cause for great concern as they will hinder progress in addressing alcohol-related harm.
 - Participants' responses indicated that human and technical resources are sorely lacking,
 - that there is limited willingness to address the problem (alcohol-related harm),
 - that minimal programs are available, and finally,
 - that there is limited data.
- These concerns, when taken together, reflect major gaps in capacity and represent significant obstacles to progress in alcohol-related harm reduction.



Table 1

Mean dimension and overall adjusted aggregate scores* of the readiness assessment for prevention of alcohol-related harm (RAP-ARH) using a 10-point scale across 10 domains (D1-D10) by country and for the West African Region (WAAPACAS).

	Burkina Faso	Gambia	Ghana	Liberia	Nigeria	Senegal	Sierra Leone	West Africa
D1: Attitudes towards alcohol-related harm prevention	5.0	2.8	2.9	1.7	2.4	3.7	3.0	2.7
D2: Knowledge of alcohol-related harm prevention	10.0	7.5	8.6	9.0	8.6	8.7	7.8	8.4
D3: Scientific data on alcohol-related harm prevention	5.0	3.3	4.9	2.0	4.7	4.5	3.9	3.9
D4: Current programs and evaluation	2.5	3.1	3.1	2.9	3.1	2.8	3.9	3.0
D5: Legislation, mandates, and policies	7.5	9.0	10.0	7.0	7.6	8.7	8.5	6.7
D6: Will to address the problem	5.0	2.9	3.7	1.4	2.3	4.0	3.6	2.9
D7: Institutional links and resources	5.0	5.2	5.4	5.8	5.8	5.6	6.0	5.8
D8: Material resources	5.0	5.0	6.7	5.0	5.7	5.5	5.6	5.5
D9: Human and technical resources	2.5	3.7	4.4	4.5	4.4	5.1	4.4	2.5
D10: Informal social resources	2.5	4.3	2.8	3.6	3.1	3.9	5.4	4.1
Overall Adjusted Aggregate Score %:	50.0	46.8	52.5	42.9	47.9	52.7	52.1	45.0

^{*}Scores computed per the WHO RAP-CM short form guidelines and scores for each Domain can range from 0 to 10. The total aggregate score ranges from 0 to 100.



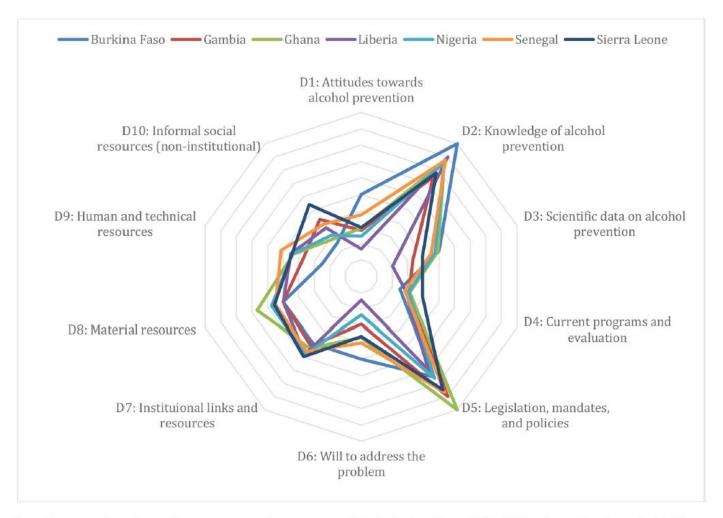


Fig. 1. Mean dimension scores from the readiness assessment for prevention of alcohol-related harm (RAP-ARH) using a 10-point scale (0–10) across 10 domains (D1-D10) in 7 countries (WAAPACAS).



Discussion

- A critical barrier in addressing these gaps have been the few alcohol policy reviews (Odejide, 2006) and assessments of alcohol use and related problems specifically in Sub-Saharan Africa (Obot, 2006).
- Previous research in related disciplines has noted the limited research output from West Africa, which may be at least partially due to limited data and limited human and technical resources (Defor, Kwamie & Agyepong, 2017; Ezeanolue et al., 2018; Sam-Agudu et al., 2016).
- Strengthening the research environment in West Africa should be an urgent priority as it is critically important for the prevention of alcohol-related harm and can also improve more broadly the systems to address local public health challenges across the region including policy development.



Limitations

- The sample size of respondents/organizations (N = 140) may limit the generalizability of the results, and this concern may be compounded when examining findings by country.
- Some bias most likely exists in who chose to respond to the survey, since those most interested in alcohol-related programs and prevention were invited to take the survey.
- The WAAPA disseminated the survey to their engaged alliances and stakeholders. Accordingly, those organizations not affiliated with the alcohol policy alliances may not have been invited to participate.
- The intent of the survey was to assess the capacity of stakeholders who are most familiar and engaged in alcohol-related harm prevention. As such, the approach and survey distribution did not target governments or its representatives, or academic institutions specifically.



Strengths

- The findings from this survey and readiness assessment identify key themes, strengths, and limitations in the field of alcohol-related harm prevention.
- However, this assessment was not designed to imply precision in the findings in the region or for a specific country, but instead serve to identify broad issues for further discussion and research with the goal of strengthening the readiness for the prevention of alcohol-related harm.
- To our knowledge, this is the first effort to understand the readiness across domains for preventing alcohol-related harm in a low-resource setting.
- As a first step, it demonstrates the feasibility of a new methodological approach and the utility of a modified, easy to-use tool in alcohol-related harm research and capacity building that may be delivered in community settings and also online as we did in this study. To our knowledge, none of the previously published RAP-CM short forms had been implemented online



Concluding Thoughts

- We find that this modified tool (RAP-ARH) has been helpful in identifying the domains most in need of attention by stakeholders to make progress in the prevention of alcohol-related harm in a region that has been understudied, but that bears a very high burden of alcohol-related harm (Morojele et al., 2021).
- Our readiness assessment for the prevention of alcohol-related harm outlines clear priorities for next steps to determine the best strategies for building ca- pacity within West Africa and to mitigate the harm caused by alcohol.
- The findings point to the urgent attention needed to focus on developing human and technical resources, shifting attitudes towards the prevention of alcohol-related harm, and strengthen the willingness to address alcohol-related harm as these domains scored the lowest in terms of readiness in the region and will serve as significant obstacles for progress.



Manuscripts Published from the Same Survey

Research Capacity and Needs for Alcohol-Related Harm Prevention in West Africa: Findings From a Cross-Sectional Survey of Stakeholders

MONICA H. SWAHN, PILD, M.P.H., RAS ADELAIDE BALENGER, M.P.H., b FRANKLIN UMENZE, MRCS, C.

MONICA H. SWAHN, PILD., M.P.H., 20." ADELAIDE BALENGER, M.P.H., P. KANKLIN UMI EMEKA DUMBILI, PILD., 2^e BOL-JENEH JALLOH, M.A., ^g & ISIDORE OBOT, PILD., M.P.H. *Wellsdar College of Health and Human Services, Kennesaw State University, Kennesaw, Georgia

PSchool of Public Health, Georgia State University, Atlanta, Georgia

ePreston Hospital Lekki, Lagos, Nigeria

«West African Alcohol Policy Alliance, Acera, Ghana

Insurance for inerupy and Heatin Research, Riel, Germany

Thepariment of Sociology and Anthropology, Naumit Azikiwe University, Anambra State, Nigeria Department of Sociology and Anthropology, Anamid Aziatwe, University, Anamora Siate, Nigeria Repartment of Foreign for Rural and Urban Transportation (FoRUT), Congo Cross, Freetown Sterra Leone, West Africa szounaation for Rurat and Urban Transportation (FORUT), Congo Cross, Processen & Centre for Research and Information on Substance Abuse (CRISA), Uyo, Nigeria vey respondents indicated greater capacisurvey respondents indicated greater capacity, tacks (e.g., monitoring and evaluation, online is tection) compared with "downstream" research translating research for community use, and pi-thrifting decision makers), Less than half (st farmillar with the World Health Organization ("Constructions" closes the low reprocessing of

ABSTRACT. Objective: The purpose of this study was to determine capacity and resource needs for alcohol prevention research among subsoliders across time constraints in west Africa. Method: We analysis at cross-sectional could policy Alliance to their member alliances are sectional could policy Alliance to their member alliances to the west Africas Alachaman and the section of t by the West African Alcohol Policy Alliance to their member alliances and stakeholders across rune countries in West Africa. Fifteen survey questions associated research capacity and priorities related to alcohol prevention and harm locally and in the region. Cervail, 14th persons programzation is survey, predominantly representing community-based programzations (NGOs) and nongovernmental organizations (NGOs) Results: Only 22% of the respondents reported that their significations have combucted research with a university or a research institution (with NEMBER: GARY 44270 or the responsess reported maximen organizations have conducted research with a university or a research institution (with percentages ranging from 13%; in Burkina Paso to 64% in Nigeria). The

a crear priority is to raciniate and streng addition, improving capacity for downstr addition, improving capacity for downshi to inform policy. Finally, increasing fan to anorm poncy, renaity, increasing tast key stakeholders involved in alcohol harn, tangible short-term priority. (J. Stud. Alcoh of alcohol interventions (France

URING THE LAST DECADE, the global effort to DURING THE LAST DECADE, are ground stated by alcohol has made little address the harm caused by alcohol has made little progress (Jernigan, 2010; Jernigan & Trangenstein, 2020). In fact, alcohol use contributes to about 5% of deaths and 5% of the global disease burden (World Health Organiza-278 Of the groups disease unique (world regain Organization [WHO], 2018a). Moreover, ample evidence exist demonstrating substantial alcohol harm across populations and settings (Lopez et al., 2006; Rehm et al., 2009; WHO, 2018a), and concern continues to grow regarding the disproportionate burden of alcohol-related harm in sub-Saharan Africa (Adeloye et al., 2019; Ferreira-Borges et al., 2017; Morojele et al., 2021). Even so, research on the prevention oronogene of all Mally, Even and research on one prevention of alcohol-related harm is sorely lacking, as are evaluations

*Correspondence may be sent to Monica H. Swahn, Dean, Wellstar Collogs of Health and Human Services, Kennesaw State University, Prillarum lege of Hearm and Human Services, Kennesaw some University, Filliannes Hall, Room 4103, 520 Parliament Garden Way, Kennesaw, GA 30144, or riais, Koom a10.5, 220 ramamen (Jaroen Way, Kennesaw, GA 3014a, or via email at: msoalin@kennesaw.edu. All ambers have personally and acvia email at, mewannesseenesse uvery neen involved in satisfamery works teating to use report to themselves jointly and individually responsible for its content.

doi:10.15288/jsad.2022.83.608

in West Africa. In a recent comparison of the

Africa, West Africa (non-Mus out with the highest number attributable deaths and disal pared with East Africa, South (Morojele et al., 2021). Unfi prising, the West African re the WHO SAFER prioritie 2018b). The five WHO SAI and interventions that inclualcohol availability," "Adva counter measures," "Faci interventions, and treatm hensive restrictions on all promotion," and "Raisit taxes and pricing polic West African countries address harmful alcoh-Even among countries not sufficiently enforce

608

Journal of Epidemiology and Global Health (2022) 12:160-167 https://doi.org/10.1007/s44197-022-00035-7

RESEARCH ARTICLE

Impact of the COVID-19 Pandemic on Alcohol Treatmen Access and Harm Prevention in West Africa: Reports fro and Community-Based Organizations

Monica H. Swahn 10 · Adelaide Balenger 20 · Fra Emeka W. Dumbili 7.8 . Isidore Obot 9 ..

Received: 13 August 2021 / Accepted: 14 March 2022 / Publi © The Author(s) 2022

Background Recent research highlights how the namurar wan the world Health Organization Conclusions: Given the low proportion or elated work who have worked with universit a clear priority is to facilitate and strength about the control of the terns, yet research thus far has largely overlook COVID-19 pandemic has affected access to ald this research gap in West Africa, a low-resource Objectives To understand the impact of the C alcohol harm prevention activities in West Af Methods This study analyzed data from a cr distributed by the West Africa Alcohol Poli-(N=140 participants) to understand their pe Results Our findings convey a significant ad West Africa, Overall, 94% of participants in work. In addition, 71% of participants repor 44% of the respondents indicated that peop they perceived it to be harder to get alcoho Conclusions These data underscore the si accessing alcohol treatment and organizat alcohol harm, this impact could exacerbat

Keywords Alcohol prevention · Alcohol

Abbreviations

Community-Based Org NGO Non-Governmental Or WAAPA West African Alcohol WAAPACAS West African Alcohol Capacity Assessment

Contents Ests available at Science Direct

International Journal of Drug Policy

A readiness assessment for the prevention of alcohol-related harm in West Africa: A new methodological approach to inform practice and policy

Monica H. Swahn ** Zakaria Robow *, Franklin Umenze *, Adelaide Balenger *,

William College of Hashin and Massan Service. Research State University, 1254.
School of Phalic Massan Service, Service Service, Service Service, Service Service, Service Service, Service Massan Adaptive Service, Service Massan Service, Service Massan Service, Service Service, Service Service, Service Service, Servic

ARTICLE INFO

Objective. Alcohol related here: is a growing sowern globally and parentalely in Wort Africa, linewere, took for stamming the renderest for personation of alcohol related and in low resources of Child Africa, linewere, took of CAACOO, is assure renderes for the prevention of distributions of Child Africa, linewere, took of CAACOO, is assure renderes for the prevention of almohol celled home across when the Africa, linewere, took of CAACOO, is assure renderes for the prevention of almohol celled home across when the africance of the prevention of almohol celled home across when the africance of the prevention of almohol celled home across when the africance of the prevention of almohol celled home across when the africance of the prevention of almohol celled home across when the africance of the prevention of almohol celled home across when the prevention of the prevention of almohol celled home across when the prevention of the preven (RAP CAS), is seen made on by the prevention of almost ordard horn across West Abria.

Archecks: We confidence on decreasing survey in the \$11 of 2020, distributed by the West Abria Abri

modeful measure is one the KAP CM short form.

Results: In sure of general readment, the overall adjusted aggregate score for West Africa was 45.0% (ranging
from 45, 9% of the first in 5.0.2% in 6 first of the ten domains among (in an 40-10 cask), serious for (in an 40-10 cask), seriou attitudes toward preventing alcohol related hum (2.7), and the will to address the problem (2.9).

Condustries; Our results demonstrate inhumental variability around extents in the readstens to a sidem alcoholrelated hum. A side of the property of the

Leading experts in alcohol mesench and policy development have asknowledged the limited progress in addressing a kedool related harm, which represents a proving concern in the global public which reduced memory and a support of the progression and a support of the global public of memory and public pub chef Gilbermore, 2019, Adopt Global Builde on global public builde control collisions of the collision Jusy autroutation to account (Worse Finance Organization, 2016s) and with increased sholed consumption (Ferrei's Borges, Dias, Babor, Esser § Parry, 2015). A recent study noted that "Sub-Saluran Africa has long

been characterized as a region with weak decivity policies, high proportion of abusiness and leavy spicalle detaken (among draken) and as a target for a master opassion by global decivity producers, (Morgele, Dembili, Obot 8, 1911-1912), p. 4071).

a Parry, 2021, p. 403).

Begun research has highlighted that West Africa (non-Mealin ma-loc) containing has some or the highest numbers of gre-standardized of the containing that the standardized standardized to other discontinuous desiration of the standardized to other discontinuous regions (a. disst Africa, Souther Mer, and Gunta-log themselved and the standardized standardi

 Corresponding earlys as: Welder College of Health and Human Services, Prills man Hall, Room 4103, 520 Farliament Garden Way, Kennesow, GA 20144, USA Rouss also also as a control of the College of Health and Human Services, Prills man Hall, Room 4103, 520 Farliament Garden Way, Kennesow, GA 20144, USA. Monica H. Swahn 9555-3959/C 2022 The Authors, Published by Element R.V. This is an open access strick under the CC BY Elemen (http://www. mswahn@kennesaw.edu

2 Springer



https://doi.org/10.1093/heapro/daab208 Developing an alcohol harm prevention research agenda in West Africa: a mixed methods

Adelaide Balenger¹, Franklin Umenze^{2,3}, Emeka Dumbili^{4,5}, Binta Sako⁶, Isidore Obot⁷, and Monica H. Swahn 18.4

ieorgia State University, USA, Lagos, Nigeria, ³West African ana, ⁴Institute for Therapy and Sociology and Anthropology, State, Nigeria, World Health West Africa, Ouagadougou, use (CRISA), P.O. Box 4230, tion and Physical Education, ty, Prillaman Hall, Room 4103,

. To mitigate the knowledge priorities for alcohol prevenzed a cross-sectional survey Policy Alliance (WAAPA). ountry alliances on alcohol ualitative survey measures, maltreatment or developed related harm, risk factors nes and conducted descriperal themes to focus on: (i) of alcohol. The most comices, such as gender-based or alcohol-related harm inknowledge. Strengthening ng alcohol-related harm in forms advocacy, programs fects of alcohol is urgently



Thank You!

Monica H. Swahn, Ph.D., MPH

Dean & Professor in Health Promotion and Physical Education

Wellstar College of Health and Human Services

Kennesaw State University

Mswahn@kennesaw.edu

