Understanding alcohol-related indicators from population surveys: answering the "Five W's of Epidemiology"

Compreendendo os indicadores relacionados ao álcool de pesquisas populacionais: respondendo aos "5 Ws da Epidemiologia"

Comprender los indicadores relacionados con el alcohol a partir de las encuestas de población: respondiendo a las "5 W de Epidemiología"

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Abstract

The harmful use of alcohol is a major risk factor for the global burden of disease, and public policies are the most effective strategies to prevent it. Population-based surveys are milestones for planning, implementing, and monitoring those policies. However, there are numerous ways to measure alcohol consumption which may result in different indicators. Researchers and stakeholders should find common ground in the understanding of these measures to avoid misinterpretation and confusion in the field. Answering to the "Five W's Epidemiology", when interpreting alcohol-related information, may improve the communication, as well as reproducibility and comparability of research findings. This paper aims to exemplify this approach by describing some indicators from the World Health Organization's Global Information System on Alcohol and Health (GISAH) and the corresponding data available from the latest Brazilian household surveys. Notably, none of the Brazilian surveys reports on all the nine selected GISAH indicators, and only two provided the necessary methodological details to be fully reproducible. A stronger agenda is of the utmost importancefor advancing in the monitoring and prevention of alcohol-related harms in Brazil.

Alcohol Drinking; Binge Drinking; Surveys and Questionnaires; Epidemiological Monitoring; Public Health Surveillance

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Introduction

Alcohol use is a major public health problem [1] which remains controversial among the general audience, stakeholders, and scientists. Individuals are strongly opinionated and the debate is often instigated by vested interests – either ideological, political, or financial [2,3]. Nevertheless, research on the consequences of alcohol consumption at individual and public health level is a huge scientific field comprising both natural and social sciences. As each area brings its specificities and evolves individually, several definitions and research methods are available. Its our job to create common ground to advance the field and the public policies.

Alcohol policies are the most effective prevention against alcohol-related harms [4,5,6]. Beyond acting in the health system, these policies encompass pricing and taxation, physical availability regulation, drinking and driving countermeasures, advertising and marketing restrictions, among others [5,6,7]. Population-based surveys are milestones for planning, implementing, and monitoring these policies; it is therefore essential – though challenging – to measure alcohol consumption in a standardized, systematic, and reproducible way. The first challenge to remember when selecting questions to assess alcohol use is that survey results are likely to support population-level prevention strategies instead of "high-risk" (individual-level) strategies. For those of us who had clinical training, the seminal *Sick Individual and Sick Populations* by Geoffrey Rose is a must-read paper which explains this difference [8]. Although the professor only briefly mentioned heavy drinking, his theory was widely accepted in the field [9].

A second challenge are the many ways to investigate alcohol consumption. Choosing appropriate questions depends on the main objective of the survey (which is often pre-defined in public bids). Such questions (and their number/length) vary if the survey aims to specifically assess alcohol consumption/harms (such as the *U.S. National Epidemiologic Survey on Alcohol and Related Conditions* – NESARC) [10,11], alcohol and substance use (i.e., *U.S. National Survey on Drug Use and Health* – NSDUH) [12], or general health/behavior/risk factors (i.e., *Behavioral Risk Factor Surveillance System* – BRFSS) [13]. In the United States, each of the above surveys is conducted by a different agency (the National Institute on Alcohol Abuse and Alcoholism – NIAAA, the Substance Use and Mental Health Services Administration – SAMHSA, and the Centers for Disease Control and Prevention – CDC, respectively).

Data from population-based surveys are also used to feed monitoring systems on alcohol and health. The World Health Organization (WHO), for example, has a Global Information System on Alcohol and Health (GISAH) [14,15]. The GISAH provides a comprehensive overview of alcohol indicators worldwide, which are also compiled in the *Global Status Report on Alcohol and Health* [16].

In Brazil, nationally representative household surveys investigating alcohol consumption are quite recent. The pioneer study was conducted in 2001 [17] and the struggle to obtain optimal reproducibility continues until now [18]. Furthermore, the different methods used resulted in huge discrepancies across surveys and with international indicators. These discrepancies could confuse clinicians, researchers, and stakeholders who are unfamiliar with alcohol epidemiology, undermining the demand for stronger policies.

One possible step to improve communication and avoid misinterpretation of alcohol-related indicators is answering to the "Five W's of Epidemiology". The "Five W's" is a mnemonic for the fundamental questions of descriptive Epidemiology: What (health event definition), Who (person/population), Where (place), When (time), and Why (causes, risk factors, modes of transmission) [19]. They help us to remember the key methodological information necessary to understand and compare data across different studies and countries as well as to assess the soundness of results. This paper aims to exemplify this approach by describing some of the GISAH indicators and the corresponding data available in the latest Brazilian household surveys.

Method

Nine alcohol-related indicators from the WHO GISAH [15] were described to answer the "Five W's". The indicators were selected based on data from population-based surveys (although whenever a country has no survey or data is incomplete, indicators can be mathematically estimated using pre-defined algorithms). Only indicators referring to the adult population were included, following the three domains specified at GISAH: Level of Consumption, Patterns of Consumption, and Harms and Consequences – Morbidity (Table 1).

Table 1

Global Information System on Alcohol Health (GISAH) selected alcohol indicators: definitions and Brazilian estimates, 2018.

Indicator	Definition	Global estimate	Estimate for Brazil
Consumption level [60]			
Alcohol, drinkers only total alcohol per capita consumption (in liters of pure alcohol)	Total (recorded and unrecorded) amount of alcohol consumed per adult drinker over a calendar year, in liters of pure alcohol. Numerator: total alcohol per capita consumption. Denominator: 1-total rate of abstainers in %.	15.1L	19.8L
Patterns of consumption * [61]			
Alcohol, abstainers lifetime	Numerator: the number of lifetime abstainers. Denominator: the total number of participants responding to the corresponding question in a given survey **	44.5%	21.4%
Alcohol, abstainers past 12 months	Numerator: the number of abstainers in the past 12 months. Denominator: the total number of participants (15+ years) responding to the corresponding question in a given survey **	57.0%	59.7%
Alcohol, former drinkers	Proportion of adults who did not consume alcohol in the last 12 months, but who did previously do that. Numerator: the number of former drinkers. Denominator: the total number of participants responding to the corresponding question in a given survey **	12.5%	38.3%
Alcohol, consumers, past 12 months	Proportion of adults who have consumed any alcohol during the past 12 months. The indicator is calculated with the help of the indicator "abstainers, past 12 months" by using 1-abstainers	43.0%	40.3%
Alcohol, HED *** (population) past 30 days	Numerator: the number of adults who reported drinking 60g or more of pure alcohol on at least one occasion in the past 30 days **. Denominator: the total number of adults responding to the corresponding question(s) in the survey plus abstainers.	18.2%	19.4%
Alcohol, HED *** (drinkers only) past 30 days		39.5%	48.1%
Harms and consequences: morbidity # [62]			
Alcohol dependence (12-month prevalence)	Numerator: number of adults (18-65 years) with a diagnosis of F10.2 during a calendar year. Denominator: midyear resident population (15+ years) over the same calendar year.	2.6%	1.4%
Alcohol, harmful use (12-month prevalence)	Numerator: number of adults with a diagnosis of F10.1 during a calendar year. Denominator: midyear resident population (15+ years) over the same calendar year.	2.5%	2.8%
AUD (12-month prevalence)	Numerator: number of adults with a diagnosis of F10.1, F10.2 during a calendar year. Denominator: midyear resident population (15+ years) over the same calendar year.	5.1%	4.2%

AUD: alcohol use disorders; HED: heavy episodic drinking.

Notes: adults = +15 years. Alcohol per capita consumption obtained from governmental administrative records.

* A representative sample of the adult population is asked to answer questions in a survey. The first priority is given to international surveys followed by national surveys;

** Weighted by survey design;

*** HED = consumption of 60g of pure alcohol, which corresponds to approximately 6 standard alcoholic drinks;

Preferred data sources: surveys representative for the population using validated instruments that had been shown comparable. Additional health services reporting systems may provide complementary or confirmatory information. When survey data is not available, estimation models are performed.

To show how the "Five W's" would be answered by the information obtained from Brazilian surveys, key methodological information and results from the following nationwide household surveys conducted face-to-face are presented:

(1) *2nd Brazilian Household Survey About the Use of Psychotropic Drugs* (II LNUDPB) conducted by the Brazilian Center of Information on Psychotropic Drugs (CEBRID) in 2005 [20];

(2) *2nd Brazilian National Alcohol and Drugs Survey* (LENAD II) conducted by the National Institute of Science and Technology for Public Policies on Alcohol and Other Drugs, Federal University of São Paulo (INPAD/ UNIFESP) in 2011-2012 [21];

(3) *3rd Brazilian National Survey on Drug Use by the Brazilian Population* (3rd LNUD) conducted by the Institute of Communication and Scientific and Technological Information in Health, Oswaldo Cruz Foundation (ICICT/Fiocruz) in 2015 [22];

(4) *2nd Brazilian National Health Survey* (PNS) conducted by the Brazilian Institute of Geography and Statistics (IBGE) in 2019 [23,24];

Only information from official/summary/executive reports publicly available online are presented. Data were selected from reports instead of scientific papers since those are a source of information for many stakeholders and lay citizens.

Results and discussion

What – definitions on alcohol consumption

Standardized definitions and questionnaires to assess alcohol use in population-based surveys are plenty available, as well as their main advantages/disadvantages, psychometric properties, and biases. Several studies [25,26,27,28] have been conducted to increase their accuracy and reduce measurement error. Young researchers on the field and stakeholders must understand the objective of the questions/measures and why they should be selected. Though these methods evolve, they are usually tested before their implementation in the highly expensive population surveys.

• **Levels of consumption**

The main indicator to evaluate alcohol consumption at the population level is "Alcohol per capita consumption (in liters of pure alcohol) – APC". It can be obtained using data from administrative public data on sales, considered the best estimate of alcohol consumption in any country [29,30,31,32]. In fact, evidence shows that compared to sales data, all alcohol-related surveys underestimate alcohol consumption from 30% to 70%.

The WHO compiles total APC from almost all the signatory countries profiting from sales, agriculture, import/export, and other administrative records. Total APC, however, is an average for the entire population – including both individuals who drink and do not drink alcohol. For estimating APC among drinkers it is necessary to conduct a survey and obtain the number of individuals who have drank within a specific time frame. In Brazil, it was estimated that the total APC (including recorded and unrecorded alcohol consumption) was 7.8 liters of pure alcohol in 2016. Table 1 shows that, among drinkers, the APC was estimated at 19.8 liters.

• **Patterns of consumption**

Quantity-frequency (QF) of alcohol consumption varies across population groups. These variations can be understood as "patterns of alcohol consumption", which influence the frequency of both acute (such as drinking and driving, violence, sexual risk behaviors) and chronic alcohol-related problems (such as alcohol dependence and other clinical outcomes, including cirrhosis, cardiovascular diseases, and cancer) [5].

Five indicators are classified as patterns of alcohol consumption in the GISAH: lifetime abstainers, 12-month abstainers, former drinkers, 12-month drinkers, and heavy episodic drinking (past 30 days) (Table 1).

To estimate the proportion of lifetime abstainers, surveys must ask regarding lifetime use of alcohol. This can appear as a filter question such as "Have you ever drank an alcoholic beverage during your lifetime?" [12], where if individuals answer they have not, they are considered lifetime abstainers and all the additional questions are imputed as "no". The same logic is used to estimate the number of 12-month abstainers (and drinkers) whereas the estimated proportion of former drinkers combines these two measures (lifetime and 12-month drinking). Lifetime drinking/abstention may also be helpful, over time, to estimate the number of individuals who started drinking in a given year (incidence) [33]. Nevertheless, compared with 12-month and 30-day, lifetime drinking is most likely to present recall bias [34,35].

Twelve-month drinking is a *sine qua non* question to evaluate alcohol use disorders (AUD) and the prevalence of alcohol consumers and abstainers per year. In turn, past 30 days-drinking is the most accurate timeframe to assess QF, being used to evaluate heavy episodic drinking and binge drinking.

Heavy episodic drinking (HED – i.e., drinking six or more alcoholic drinks in a single occasion) is a WHO definition whereas binge drinking (drinking five or more alcoholic drinks – or four drinks, for women – within a couple of hours) is a NIAAA definition [36]. These are sometimes used as synonyms to estimate the ingestion of 60-80g of pure ethanol (which may lead to alcohol intoxication, i.e., "drunkenness"). One alcoholic drink is a standardized dose of ethanol (12-14g) which usually corresponds to a can of beer or a glass (120mL) of wine or 30mL of spirits (whisky, "cachaça", gin, etc.). When asking about binge drinking, researchers must clarify what they mean by "one drink" since the percentage of pure ethanol varies among the types of beverages and cultures. These are approximate measures, which are not used for pharmacological studies and do not indicate the precise alcohol blood level for an individual.

Binge drinking/HED is the alcohol use pattern presenting the largest effect on the incidence of acute alcohol-related problems, morbidity and mortality at the population level. In addition, it is also a good predictor of alcohol dependence [37,38]. Some authors argue it is the single most important question to screen for alcohol problems. In 2017, Rehm et al. [32] recommended adding HED in epidemiological surveys due to its overwhelming impact to the burden of disease. It was also suggested that HED could be used as a surrogate measure for estimating AUD – because it brings less stigma and is easily operationalized [28].

- **Harms and consequences – morbidity**

Alcohol consumption influences the risk of about 230 health problems, including infectious diseases, noncommunicable diseases (NCDs), cancer, and injuries. Three main mechanisms cause these harms: (i) toxic effects on the body (resulting mainly in chronic diseases such as liver disease, heart disease, and cancer); (ii) intoxication (see binge drinking above); and (iii) AUDs [39]. Much information related to harms from toxic effects on the body and from intoxication are/should be available on health information systems (such as Brazilian Mortality Information System – SIM and Brazilian Information System for Notifiable Diseases – SINAN), traffic report systems (such as Brazilian National Traffic Department – DENATRAN), and violence register systems (which are not unified in Brazil). AUDs, however, are both mental health disorders and risk factors for other health/social conditions. Especially since AUDs are among the most prevalent and the least diagnosed/treated mental health disorders worldwide [40,41], estimating its proportion in population-based surveys is essential.

The Lancet's latest Seminar on Alcohol Use Disorders [41] provides a comprehensive review on how AUD is diagnosed. Briefly, AUD are defined differently by two diagnostic systems that evolved independently: the Diagnostic and Statistical Manual of Mental Disorders (DSM, version 5, since 2015) [42] and the International Classification of Disease (ICD, version 11, since 2018) [43]. The latest revision of the DSM remains controversial and many studies have compared it to the previous DSM-4 and to ICD-10 and ICD-11 [41,44,45,46,47]. The revision of DSM-4, which agreed with ICD-10 [47], significantly changed AUD criteria. Overall, in DSM-5, AUD is diagnosed by 11 criteria, where its severity (light, moderate, and severe) is defined by the number of positive criteria. ICD-11, in turn, divides AUD into harmful use and alcohol dependence, the latter being the most severe. In short, alcohol dependence is characterized by compulsive heavy alcohol use and loss of control over intake, which continues despite adverse consequences and the availability of other rewarding activities [41,43] (Figure 1).

Figure 1

The spectrum of alcohol use and the classification of alcohol use disorders (AUD) according to the Diagnostic and
Statistical Manual of Mental Disorders (DSM) and the International Classification of Diseases (ICD).
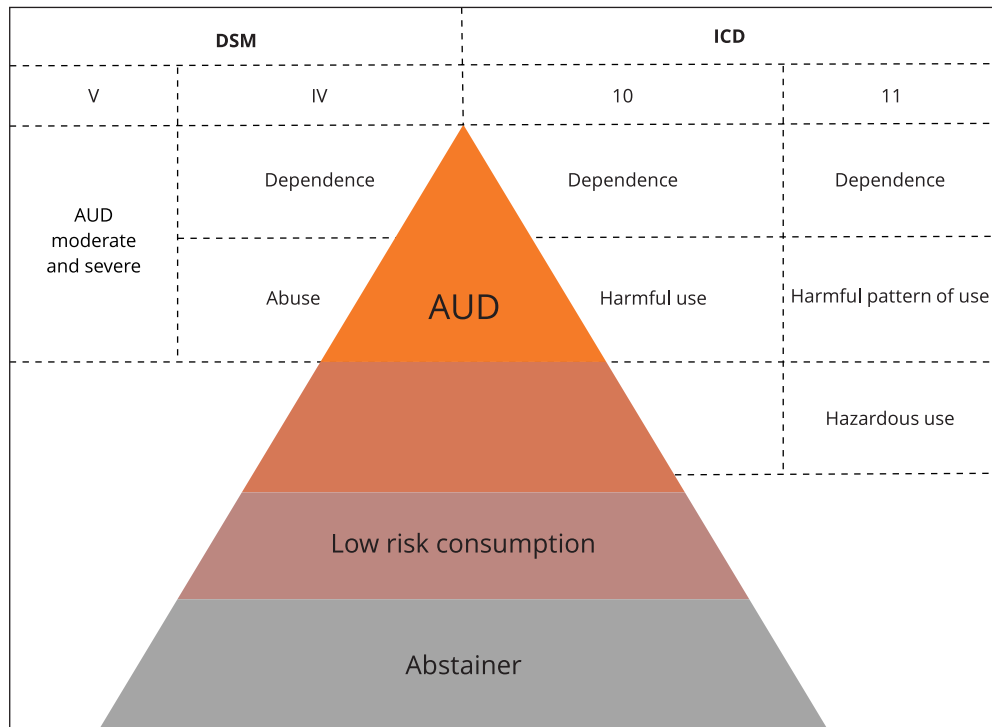
Source: adapted from Saunders et al. [47].

Standardized questions and questionnaires based either on DSM or ICD criteria can be used to screen
for or diagnose AUD [48,49,50].

Table 2 shows the results from the Brazilian probability sample surveys. Probability sample sur-
veys are designed to obtain the prevalence of something in the entire population without interviewing
all individuals (the only study which evaluates all the population is the census). In these surveys, punc-
tual prevalence is the population-weighted average of the proportions of subjects with the outcome
being investigated in population strata defined in complex sampling.

Assessing the precision of the estimated prevalence value ("margin of error") requires estimating
the 95% confidence interval (95%CI). The true value in the entire population, with 95% certainty, is
therefore any value within the interval. For instance, the II LNUDPB [20] estimated that 74.6% of the
sample have drunk some alcoholic beverage during their lifetime, but the "true" estimate in the Bra-
zilian population, with a 95% of certainty, is any value from 70.3% to 78.9%. To exemplify this, in the
case of an election poll, the estimate would be "74.6% with a margin of error of 4.3 percentage points".

The 95%CI is inversely related to sample size, i.e., the larger the sample, the lower the interval and
the more precise is the estimate. The PNS [23,24], which interviewed more than 90,000 persons, thus
has a narrower 95%CI (Table 2).

Furthermore, whenever 95%CIs overlap, punctual prevalence cannot be considered different,
assuming a 0.05 type I error. For instance, the prevalence of binge drinking was 16.5% in the 3rd
LNUD [22] and 17.1% in the PNS [23,24], but the prevalence in the 3rd LNUD cannot be considered lower
because its 95%CIs overlap with that of PNS. Notably, only the 3rd LNUD and the PNS provide
95%CIs for all the estimates in the reports.

Table 2

Key methodological information and results from Brazilian surveys conducted between 2005 and 2019.

	II LNUDPB [20] % (95%CI) N (x 1,000) *	LENAD II [21] % (95%CI) N (x 1,000) *	3rd LNUD [22] % (95%CI) N (x 1,000) *	PNS [24] % (95%CI) N (x 1,000) *
What				
Patterns of alcohol use				
Lifetime	74.6 (70.3-78.9) 37,953	-	66.4 (64.8-68.0) 101,615	-
12 months	49.8 (?) ?	50 ** (?) ?	43.1 (41.8-44.4) 65,943	-
30 days	38.3 (?) ?	-	30.1 (28.9-31.3) 46,036	30.6 (29.4-30.65) 47,780
Binge drinking	-	59 **,*** (?) ?	16.5 (15.6-17.5) 25,311	17.1 (16.6-17.5) 27,162
Alcohol harm and consequences				
Harmful use/Abuse	-	-	-	-
Dependence	12.3 (9.1-15.6) *** 6,268	9 (?) **,*** ?	1.5 (1.2-1.8) 2,328	-
AUD	-	-	-	-
Who				
Sample size (n)	7,939	4,607	16,273	90,846
Age (years)	12-65	> 14	12-65	≥ 18
When				
Year	2005	2012	2015	2019
Where				
Coverage	Municipalities with ≥ 200,000 inhabitants	Nationwide	Nationwide	Nationwide

95%CI: 95% confidence interval; AUD: alcohol use disorders; LENAD II: *2nd Brazilian National Alcohol and Drugs Survey*; II LNUDPB: *2nd Brazilian Household Survey About the Use of Psychotropic Drugs*; 3rd LNUD: *3rd Brazilian National Survey on Drug Use by the Brazilian Population*; PNS: *Brazilian National Health Survey*.

* Estimated population;

*** Denominator used to estimate the prevalence is not clear (i.e., entire population vs. individuals reporting alcohol use);

** Among individuals 18 years or more. Information regarding the entire sample (including those 14-17 years) is not presented.

Who – study population

The second "W" is "Who", i.e, the definition of the study population. Since the population-based surveys mentioned in this study aim to represent the entire population living in households, certain groups were not interviewed nor analyzed, such as the institutionalized, incarcerated individuals living in the streets, Indigenous people living in protected areas, etc.

Furthermore, studies may include different age ranges. While GISHA includes individuals older than 15 years, the II LNUDPB and 3rd LNUD include individuals 12-65 years, the LENAD II [21] includes those older than 14 years, and PNS includes those 18 years and older. Since alcohol consumption varies with age (e.g., adults usually drink more than adolescents, and young adults drink more than older adults), the mean prevalence of alcohol consumption and harms can also vary according to the age group evaluated.

To interpret HED, AUD, and alcohol dependence, analyzing the denominator is essential to understand if the prevalence refers to the entire population (drinkers and non-drinkers) or only to drinkers. Both measures are useful for different purposes, but prevalence will always be higher when

the denominator is lower (i.e, among drinkers) (Table 1 – lines: Alcohol, HED *** (population) past 30 days and Alcohol, HED *** (drinkers only) past 30 days).

Finally, researchers must also consider who did not answer the survey (non-response) and how missing data was handled. Dealing with non-response/handling missing data in probability sampling can be done in several ways from the design to the statistical analysis. This is a highly specialized area and, although its discussion is beyond the scope of this paper, it is good practice to provide information on the methods used so that other scientists can scrutinize and reproduce them (or not).

Where – place

Surveys can have different coverages according to the study's objective. GISAH indicators cover the entire country, though surveys which provide the data sometimes are not. The only Brazilian survey without a nationwide coverage is the II LNUDPB (which included only municipalities with ≥ 200,000 inhabitants).

An additional result obtained by probability samples and related to "Who" and "Where" is the "Total Estimated Population". This value represents the approximate number of people presenting the characteristic studied. Though estimating 95%CI for it is also possible, most international reports do not – likely due to lack of space. The II LNUDPB, estimated that 74.6% of Brazilians, almost 38 million people, have drunk during their lifetime. The 3rd LNUD, on the other hand, estimated that 66.4% of Brazilians have drunk during their lifetime, but this smaller percentage represented around 101 million people. Before these discrepancies, one must look for additional methodological detail that can explain the differences in coverage, age group, denominators, and definitions. In this case, the difference was likely related to coverage.

When

The timeframe of data collection is the easiest aspect to evaluate. If all the above items are equal, successive surveys can be used to estimate trends, as long as statistical analysis is conducted. The simple comparison of two punctual prevalences (without appropriate statistical analysis) is not a scientifically valid time trend. Though estimating trends is possible even if some of the W's differ, this requires additional analytical steps.

Why

The last "W", which refers to causality, cannot be answered in population-based surveys. Because of this design limitation, it should be addressed by longitudinal or experimental designs [51]. Most of the scientific papers profiting from population-based surveys aim to investigate associated factors [52,53], which requires performing a multiple regression model. Such models, however, must consider design effect, sample weights, and calibration.

Limitations

The "Five W's" can be considered as a tool for describing and interpreting survey results despite not covering all the necessary knowledge to design and analyze a study. This manuscript does not aim to discuss specific survey results and clinical, epidemiological, sampling, and analytical methods. These are analyzed in the classical literature such as *Edwards' Treatment of Drinking Problems: A Guide for Helping Professions* [54], *Modern Epidemiology* [55], *Survey Methodology* [56], and *Complex Surveys: A Guide to Analysis Using R* [57], among others. Nevertheless, even if other approaches are used, assessing results in a systematic manner is essential to all the actors who wish to contribute to the field.

Furthermore, all aspects of the methods (questionnaire, sampling, data collection procedures, data systems, data entry, all the statistical analyses, and so on) can and should be improved. All survey procedures/methods must therefore be well documented, saved, and made available to those interested. In this regard, the "Five W's" are insufficient to achieve successful results. Ideally, scientific studies should investigate the impact of every potential change. As an example, in 2014, the SAMHSA

published a 230 pages-long report compiling the abstracts of scientific literature to evaluate the methodological changes in the NHSUD from 1971 to 2014 [58].

Conclusions

This manuscript focused on the "Five W's of Epidemiology" to present some of the fundamental concepts and key methodological aspects regarding alcohol-related indicators obtained in population-based surveys. The "Five W's" are an easy framework to remember and both scientists and stakeholders can benefit from them. The hardest "W" to choose and evaluate is "What" since harmful alcohol use is a subjective and changeable measure based on different systems of classification. Nevertheless, all the other "W's" and methodological elements of probability surveys must be clear. None of us should take results for granted, rather we should be able to evaluate them in a scientific, skeptical, and dispassionate way.

It is quite disappointing that none of the Brazilian reports presented all the GISAH indicators, and further analyzes would be necessary (provided the required data was collected). If planning did not foresee those indicators, comparisons with international data may be jeopardized. Some of the Brazilian surveys show significant differences between each other (almost 10 times higher prevalence of binge drinking and alcohol dependence, for example) compared to global GISAH indicators. Rather than dismissing or disqualifying these results, one could take a "detective approach" and look for possible methodological reasons which can explain these discrepancies. Well-documented methods will thus provide hints for the curious readers and the necessary information for skilled, independent scientists who can evaluate them and reproduce the survey.

Finally, there has been advance in the global agenda to prevent alcohol-related harms. For instance, to tackle the harmful consumption of alcohol became a target for the Sustainable Development Goals [59], and the WHO launched the SAFER initiative [7] (providing tools for the countries to implement cost-effective policies against alcohol). Population-based surveys are a crucial component for monitoring these strategies emphasizing the importance of a systematic collection and assessment of information on alcohol.

Additional information

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Conflicts of interests

Dr. R. B. De Boni was the coordinator of psychiatric epidemiology in the 3rd LNUD.

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Resumo

O uso nocivo do álcool é um importante fator de risco para a carga global de doença e políticas públicas são as mais eficazes medidas de prevenção. Pesquisas populacionais são marcos para planejar, implementar e monitorar estas políticas. No entanto, existem inúmeras formas de medir o consumo de álcool que podem resultar em diferentes indicadores. Pesquisadores e interessados devem encontrar um ponto em comum na compreensão dessas medidas para evitar interpretações erradas e confusões no campo. Responder aos "5 Ws da Epidemiologia" ao interpretar informações relacionadas ao álcool pode ser útil para melhorar essa comunicação, bem como a reprodutibilidade e a comparabilidade dos achados da pesquisa. Este artigo busca exemplificar essa abordagem, descrevendo alguns indicadores do Sistema de Informação Global sobre Álcool e Saúde (GISAH) da Organização Mundial da Saúde e os dados correspondentes disponíveis nas últimas pesquisas domiciliares brasileiras. Nenhuma das pesquisas brasileiras relata todos os nove indicadores selecionados no GISAH, e apenas duas forneceram os detalhes metodológicos necessários para serem totalmente reprodutíveis. Uma agenda mais forte é de extrema importância para o avanço no monitoramento e prevenção de danos relacionados ao consumo de álcool no Brasil.

Consumo de Bebidas Alcoólicas; Consumo Excessivo de Bebidas Alcoólicas; Inquéritos e Questionários; Monitoramento Epidemiológico; Vigilância em Saúde Pública

Resumen

El uso nocivo del alcohol es uno de los principales factores de riesgo de la carga de enfermedad en todo el mundo, y las políticas sobre el alcohol son las estrategias más eficaces para prevenirlo. Las encuestas basadas en la población son un hito para planificar, aplicar y supervisar esas políticas. Sin embargo, existen incontables formas de medir el consumo de alcohol que pueden dar lugar a indicadores diversos. Los investigadores y las partes interesadas deben encontrar un terreno común en la comprensión de estas medidas para evitar interpretaciones erróneas y confusión en el campo. Responder a las "5 W de Epidemiología" siempre que se interprete la información relacionada con el alcohol, puede ser útil para mejorar esta comunicación, así como la reproducibilidad y la comparabilidad de los resultados de la investigación. Este artículo pretende ejemplificar este enfoque describiendo algunos indicadores del Sistema de Información Global sobre Alcohol y Salud (GISAH) de la Organización Mundial de la Salud y los datos correspondientes disponibles en las últimas encuestas de hogares brasileñas. Cabe destacar que ninguna de las encuestas brasileñas informa sobre los nueve indicadores seleccionados del GISAH, y sólo dos de ellas proporcionaron los detalles metodológicos necesarios para ser totalmente reproducibles. Una agenda más sólida es de suma importancia para avanzar en el seguimiento y la prevención de los daños relacionados con el alcohol en Brasil.

Consumo de Bebidas Alcohólicas; Consumo Excesivo de Bebidas Alcohólicas; Encuestas y Cuestionarios; Monitoreo Epidemiológico; Vigilancia en Salud Pública