Alcohol Use in Northeast India: A Sociocultural Perspective

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Cite this paper as: Saurav Roy, Dr Priyanka, Dr Rajesh Nair (2024) Alcohol Use in Northeast India: A Sociocultural Perspective". *Frontiers in Health Informatics*, (8), 5435-5452

Abstract

The sociocultural background of Northeast India features a long-lasting connection to alcohol consumption. The traditional way of consumption of alcohol is part of the regional and cultural heritage and also it is ingrained in the social customs. This paper reviews alcohol use patterns in Northeast India by studying both cultural elements as well as societal factors that affect drinking practices and their subsequent social effects. Furthermore, the study investigates how socioeconomic factors like age, gender, caste, religion, employment, and livelihood influence drinking patterns. Understanding the effects of culturally responsive policy initiatives is a critical gap in research, especially in areas like data availability, public awareness, and policy enforcement. There is a dearth of research on the efficiency of current laws, the contribution of community involvement to alcohol management, and the availability of culturally sensitive intervention programs. This review guides researchers to safeguard public health while respecting the cultural traditions of Northeast India.

Keywords: Alcohol consumption, Northeast India, Cultural practices, Socioeconomic factors, Policy interventions, Public Health

Introduction

Northeast India, which consists of the eight states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura, has its own traditions of drinking alcohol and social structures (Bhattacharya & Deka, 2023; Swargiary, 2023). The consumption of alcohol has been fundamental throughout the tribal and non-tribal communities for hundreds of years with its common association with ceremonial events and cultural festivities (Mahanta, 2016). This region has the highest prevalence of alcohol use compared to the rest of India (70.83% vs 50.03%) (Saikia, 2020). Young male adults (25-34 years) in the tribal communities have higher levels of consumption than females (Yadav, 2017). The socio-cultural conditions together with modernization practices have created new alcohol consumption patterns which worry experts about the effects on health and social development. Notwithstanding being an accepted cultural practice (Chaturvedi, 2016), alcohol use has become a critical public health issue because it leads to dangerous behaviours (Chakrabarti, 2015) along with financial loss and detrimental medical results (Baruah, 2019). Native tribal communities of the region have practised local alcohol brewing and drinking since ancient times but modern commercial trends

ISSN-Online: 2676-7104

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show signs of alcohol misuse (Borah, 2021). This review critically evaluates existing research material about alcohol use patterns in Northeast India while examining the relationship between local customs and current health threats.

Research Objectives

- 1. To examine the cultural significance of alcohol use in Northeast India.
- 2. To investigate the social factors influencing alcohol consumption patterns.
- 3. To highlight research gaps and recommend culturally sensitive policy interventions.

Based on these objectives, the study proposes the following hypothesis to empirically test the socio-cultural dimensions of alcohol use. These are:

Hypothesis

- 1. There would be a close link between alcohol use with traditional rituals and social gatherings, with specific types of locally brewed beverages.
- 2. There would be some associations of alcohol use with changing socio-economic conditions.
- 3. There would be a lack of culturally sensitive alcohol control policies & intervention strategies which contribute to alcohol use.

Following determining the hypothesis, the inclusion and exclusion criteria are applied to narrow down the research relevant to its core objectives.

Inclusion Criteria:

- Studies examining the socio-cultural aspects of alcohol consumption in Northeast India.
- Research published between 2015 and 2024.
- Studies highlighting social attitudes, policy implications, and cultural traditions related to alcohol use.

Exclusion Criteria

- Studies which focus solely on the medical or biological effects of alcohol.
- Research unrelated to Northeast India.
- Studies published before 2015.

Procedure

We have applied a step-by-step process to gather data using methodical examination. This research utilized peer-reviewed journal articles, govt. Reports and survey-based studies as its sources. The main objective of this research is to explore existing alcohol use literature about Northeast India concerning the socio-cultural impacts and public health concerns. The research investigation utilized the major electronic databases of PubMed along with JSTOR and Google Scholar. Boolean operators operated in combination (AND/OR) guided the research filtering process to obtain a specific and comprehensive collection of studies. The research relied on the essential keywords "alcohol use", "Northeast India" and "socio-cultural practices". The terms were first used separately and then combined to retrieve a comprehensive set of relevant studies.

A particular set of criteria was defined for the inclusion and exclusion of the studies aligned with the research objectives. We have selected studies from the period of 2015 through 2025 to include

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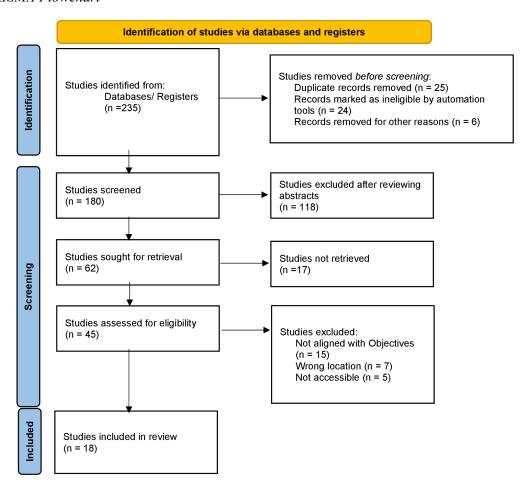
the current research trends. The author screened the relevant papers first at the title abstract level followed by complete text reviews of selected resources. This study excluded general alcohol literature about the Indian population unless these studies provided a detailed regional context for Northeast India. The screening process led researchers to organize the accepted studies into divisions relating to cultural importance, social impact, alcohol usage trends and their health consequences, along with policy implications. This study employed synthesis techniques to extract the relevant themes and detect research gaps to present the findings followed by the discussion and recommendations.

Results

We identified 235 articles. The article selection process resulted in 18 articles being retained after duplicate elimination along with the application of inclusion and exclusion criteria (Fig.1 shows this process).

Figure 1.

PRISMA Flowchart



Note: Adapted from Haddaway, N. R., Page, M. J., Pritchard, C. C., & McGuinness, L. A. (2022). PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis. Campbell Systematic Reviews, 18(2), e1230. https://doi.org/10.1002/c12.1230

Table 1 *Characteristics of the Studies along with Key Findings*

Sl.	Author	Region	Age group	Study design	Key findings
No					
1	Balasubramani et al. (2021)	India, with a focus on Northeast India	Not specified	Cross-sectional study	Northeast India is a major alcohol hot spot with a high prevalence among men. Sociodemographic factors like tobacco use, wealth, and education influence alcohol consumption.
2	Salman Hussain (2021)	Northeast India	Women in Northeast India	Cross-sectional study	Higher literacy rates and per capita income correlate with lower alcohol consumption among women.
3	Himanshu K. Chaturvedi et al. (2019)	Arunachal Pradesh	Tribal communities	Cross-sectional study	High prevalence of alcohol use among Indigenous and Hindu groups in Arunachal Pradesh.
4	Himanshu K. Chaturvedi et al. (2016)	Arunachal Pradesh	Tribal population	Cross-sectional study	Alcohol is socially accepted and consumed as a 'holy drink'. High prevalence of substance use among the tribal population.
5	Manali Swargiary (2023)	Northeast India	Adults	Cross-sectional study	Alcohol consumption is popular among younger adults, while tobacco use is more prevalent among those aged 45 and above. Country liquor is commonly consumed.
6	Bhattacharya et al. (2023)	North- East India	Tribal communities	Review	Rice-based alcoholic beverages are significant in the food and socio-cultural life of tribal communities.

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Sl. No	Author	Region	Age group	Study design	Key findings
7	Baruah et al. (2019)	Assam	Patients at a Drug Deaddiction Centre	Cross-sectional study	Alcohol is the most commonly abused substance. Homemade liquor is prevalent, contributing to unrecorded alcohol consumption.
8	Borah et al. (2021)	Assam	Ethnic communities	Ethnobotanical study	Traditional alcoholic beverages are prepared by various ethnic communities in Assam using 129 plant species.
9	Mahanta et al. (2016)	Assam	School- going adolescents	Cross-sectional study	Homemade alcoholic drinks are commonly consumed during religious and social functions. Parental habits influence alcohol intake.
10	Yadav et al. (2017)	Northeast India	Adults	Cross-sectional study	Age, education, religion, caste, and economic status influence alcohol consumption.
11	Chakrabarti et al. (2015)	Sikkim	Young adults	Cross-sectional study	Unrecorded alcohol consumption is influenced by cultural acceptance, home production, and low prices.
12	Oswal et al. (2021)	Northeast Region of India	Adults	Cross-sectional study	Alcohol consumption is highest among males aged 25-44 in the middle-income group.
13	(2015)	Manipur	Adults	Case-control study	Socio-economic factors such as lower education levels, unemployment, and smoking are significant risk factors for alcohol dependence.
14	Padhi et al.	Eastern	Patients with	Cross-sectional	Alcohol use leads to

Sl. No	Author	Region	Age group	Study design	Key findings
	(2015)	India	alcoholic liver disease	study	severe financial strain and social disruptions.
15	Kaustubh Deka (2016)	Northeast India	Not applicable	Historical analysis	Women-led movements against alcohol prohibition evolved into broader human rights and peace negotiations.
16	Sharma et al. (2016)	Nagaland	>18 yrs	Cross-sectional study	Socio-demographic factors, sexual behaviour, and drug use influence alcohol consumption among female sex workers in Dimapur, Nagaland.
17	Saikia et al. (2020)	Northeast India	>15 yrs	Cross-sectional study	Alcohol consumption is highest among the Scheduled Tribe (ST) & underprivileged population in the Northeast.
18	Wouters et al., (2018)	Northeast India	Not specified	Qualitative research - ethnographic	The implementation of alcohol prohibition laws in Northeast India turns public drinking into secret activities which reshapes economic dynamics. These regulations disrupt traditional customs that require alcohol consumption thus altering communal traditions and community interactions. The prohibition laws establish underground markets while they transform patterns of social interaction between people.

Characteristics of Studies

A total of 18 studies concerning alcohol consumption in Northeast India have been summarized in Table 1 which incorporates 14 cross-sectional designs together with ethnographic and historical and case-control methodologies. The studies cover diverse populations across Assam (n=4), Arunachal Pradesh (n=2), Manipur (n=1), Nagaland (n=1), Sikkim (n=1), and the broader Northeast region (n=9). The research examined population groups such as adults and de-addiction centre patients together with young adults and tribal communities and adolescents and women. Research participants have been reported to be aged 15 years (Saikia & Debbarma, 2020) as well as older than 18 years (Sharma et al., 2016). Research results show alcohol use is most common among males together with members of tribal groups and people from lower economic backgrounds. Use of alcohol in this region stems from three factors that include regional cultural norms and brewing practices combined with social pressures (Chaturvedi et al., 2016; Borah et al., 2021). The consumption levels of alcohol are influenced strongly by three key socioeconomic elements: education, employment and caste status (Singh et al., 2015; Yadav et al., 2017). The implementation of prohibition laws created illegal market opportunities while leading people to change their drinking habits (Wouters & Tunyi, 2018). Research shows that literate women typically consume less alcohol compared to men whereas female sex workers tend to use alcohol at higher levels because of their demographic conditions (Sharma et al., 2016; Hussain, 2021). The assessment shows that regional alcohol use requires purpose-driven public health action and policy changes for effective intervention.

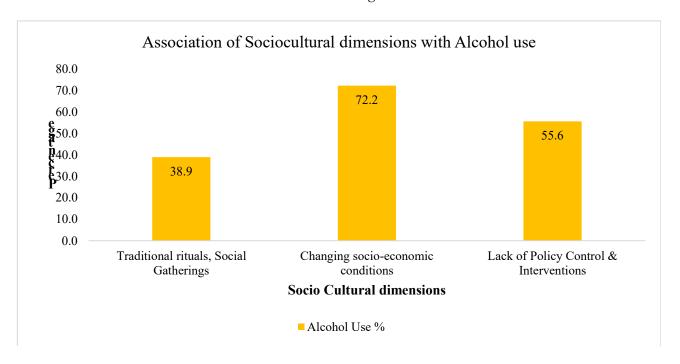
Sociocultural Influences on Alcohol Use

Table 2Association of Cultural, Economic and Policy factors with Alcohol use

Hypothesis	Variables	Alcohol Use	References
		No. of %	
		studies	
1	Traditional rituals,	7 38.9	Balasubramani et al. (2021);Baruah et
	Social Gatherings		al. (2019);Bhattacharya et al.
			(2023);Borah et al.
			(2021);Chakrabarti et al. (2015)
2	Changing socio-	13 72.2	Balasubramani et al. (2021);Baruah et
	economic		al. (2019);Bhattacharya et
	conditions		al.(2023);Chaturvedi et al.
			(2016);Kaustubh Deka
			(2016); Mahanta et al. (2016)
3	Lack of Policy	10 55.6	Balasubramani et al. (2021);Baruah et
	Control &		al. (2019); Chaturvedi et al.
	Interventions		(2016);Manali Swargiary
			(2022);Saikia et al. (2020);Sharma et

al. (2016)

Figure. 2
Sociocultural dimensions and Alcohol use in the Northeast region



The association between alcohol consumption and socioeconomic factors (Traditional rituals, Socioeconomic and Lack of policies) is quantified in Table 2. 38.9% of the studies found that social gatherings and traditional rituals serve as catalysts for alcohol intake (Balasubramani et al., 2021; Baruah et al., 2019; Bhattacharya et al., 2023; Borah et al., 2021; Chakrabarti et al., 2015). According to several studies (Balasubramani et al., 2021; Baruah et al., 2019; Bhattacharya et al., 2023; Chaturvedi et al., 2016; Deka, 2016; Mahanta et al., 2016), alcohol usage is 72.2% correlated with changing socioeconomic conditions. 55.6% of research indicates that policy control and intervention measures are necessary to prevent harmful alcohol use (Balasubramani et al., 2021; Baruah et al., 2019; Chaturvedi et al., 2016; Swargiary, 2023; Saikia et al., 2020; Sharma et al., 2016). Stronger policy frameworks and interventions should be developed because they can help reduce alcohol consumption affected by socio-economic factors.

Social Consequences of Harmful Drinking

Table 3Comparison of studies based on Socio-cultural factors along with Negative Outcomes of Alcohol use

Sl.	Study	Cultural	Social Influences	Policy Control &	Negative
No		Factors		Interventions	Outcomes
1	Balasubramani et al. (2021)	Local culture shapes alcohol consumption patterns.	Sociodemographic factors like tobacco use, wealth, and education influence alcohol consumption.	Research on anti- alcohol policy implications	High prevalence of alcohol consumption in Northeast India, particularly among men.
2	Chaturvedi et al. (2016)	Alcohol is socially accepted among tribal communities, often consumed as a 'holy drink' & shared during family gatherings. Indigenous faith had a high prevalence.	High prevalence among older adults with low education background	Further explore the social dynamics of alcohol use, potentially informing culturally sensitive prevention and treatment strategies.	Alcohol is socially accepted and shared in family gatherings.
3	Manali Swargiary (2023)	Country liquor is commonly consumed due to its availability and cultural significance.	Alcohol consumption is higher among men and younger adults.	Developing targeted interventions and policies to address substance use among younger populations	Easy availability of country liquor. Exposure to alcohol-related to domestic violence & financial struggles.
4	Saikia et al. (2020)	consumption is	Male youths in skilled/unskilled jobs have 3 times more chances of substance use than professional.	State-specific policy interventions are crucial for reducing substance use in	Significant substance use among adolescents (44.38% of 15-19 year olds).

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Sl. No	Study	Cultural Factors	Social Influences	Policy Control & Interventions	Negative Outcomes
		population in the Northeast.	Lower wealth status is linked to higher smoking & drinking. Peer influence and socioeconomic factors play a key role.	NEI.	
5	Yadav et al. (2017)	consumption	Age, education, religion, caste, and economic status influence alcohol consumption.	-	
6	Baruah et al. (2019)	Both tribal & non-tribal groups showed equally high alcohol prevalence. The traditional practice of winemaking is a significant factor.		Developing targeted interventions and policies to address substance use among younger populations	Gastrointestinal & neuropathy were linked to alcohol consumption.
7	Chakrabarti et al. (2015)	Unrecorded alcohol consumption is influenced by cultural acceptance, extensive home production, and low prices.			Problematic unrecorded alcohol consumption is prevalent among the young adult population in Sikkim.
8	Sharma et al. (2016)		Socio- demographic		Alcohol is used as a coping for

Sl.	Study	Cultural	Social Influences	Policy Control &	Negative
No	Study	Factors		Interventions	Outcomes
			factors, sexual behaviour, and drug use influence alcohol consumption among female sex workers in Dimapur, Nagaland.	support programs that are culturally sensitive and effective.	stress.
9	Singh et al. (2015)		Socio-economic factors such as lower education levels, unemployment, and smoking are significant risk factors for alcohol dependence.	educational interventions and employment programs on reducing alcohol	Dependence increases when consumption starts during youth.
10	Bhattacharya et al. (2023)	Rice-based alcoholic beverages are significant in the food and sociocultural life of tribal communities in North-East India.	Local alcoholic beverages serve as a source of livelihood within different tribal communities.		
11	Mahanta et al. (2016)	Homemade alcoholic drinks are commonly consumed during religious and social functions.			Easy availability of cheap branded liquor
12	Chaturvedi et al. (2019)	Religion and cultural tradition			High prevalence of

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Study	Cultural	Social Influences	Policy Control &	Negative
Č	Factors		Interventions	Outcomes
Padhi et al. (2015)	influence alcohol use among tribal communities in Arunachal Pradesh.	The use of alcohol produces family relationship complications and results in instances of physical abuse toward spouses. It also affects children's education.		alcohol use among Indigenous (65%) and Hindu groups (55.1%). Heavy alcohol use causes difficulties that include domestic violence and financial instability along with health problems. Individuals battling alcohol dependence encounter substantial financial stress that might force them to obtain loans or sell their belongings, also resulting in
Wouters et al., (2018)		Alcohol-related "liquor borders" in Northeast India function as intangible boundaries, significantly	In Northeast India, legal, social, and cultural boundaries shape alcohol use, with restrictions	job losses.
	Padhi et al. (2015) Wouters et al.,	Factors influence alcohol use among tribal communities in Arunachal Pradesh. Padhi et al. (2015) Wouters et al.,	Factors influence alcohol use among tribal communities in Arunachal Pradesh. Padhi et al. (2015) The use of alcohol produces family relationship complications and results in instances of physical abuse toward spouses. It also affects children's education. Wouters et al., (2018) Alcohol-related "liquor borders" in Northeast India function as intangible	Wouters et al., Wouters et al., (2018) Wouters et al., (2018) Factors Influence alcohol use among tribal communities in Arunachal Pradesh. Arunachal Pradesh. The use of alcohol produces family relationship complications and results in instances of physical abuse toward spouses. It also affects children's education. Alcohol-related In Northeast Complication and results in instances of physical abuse toward spouses. It also affects children's education.

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Sl.	Study	Cultural	Social Influences	Policy Control &	Negative
No		Factors		Interventions	Outcomes
			influencing socio-	creating hidden	
			cultural divisions.	divisions that	
				impact	
				consumption	
				patterns and	
				policy control.	
15	Salman		Better income		
	Hussain		opportunities		
	(2021)		reduce stress-		
			induced drinking		
			among women in		
			the Northeast.		
16	Borah et al.	Traditional			
	(2021)	alcoholic			
		beverages are			
		prepared by			
		various ethnic			
		communities			
		(Bodo, Karbi,			
		Rabha &			
		Mishing tribes)			
		in Assam.			
17	Oswal et al.		Alcohol		
	(2021)		consumption is		
	` ,		highest among		
			males aged 25-44		
			in the middle-		
			income group.		
18	Kaustubh		Women-led		
	Deka (2016)		movements		
			against alcohol		
			prohibition in the		
			1970s and 1980s		
			evolved into		
			broader human		
			rights and peace		
			negotiations.		
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Table 3, further shows that socio-cultural elements drive alcohol consumption at high levels in Northeast India. The local cultural traditions like rice-based alcohol production methods (Bhattacharya et al., 2023) and domestic home brewing practices (Chakrabarti et al., 2015) along with social gatherings (Balasubramani et al., 2021; Baruah et al., 2019) create a ground for crucial roles in alcohol usage. Studies reveal that alcohol consumption of individuals depends heavily on their age, education level and economic background ((Balasubramani et al., 2021; Singh et al., 2015; Yadav et al., 2017). A common theme in these studies is the lack of policy control measures and targeted intervention strategies. Research requires new policies against alcohol use while developing specific prevention strategies for young people and better methods to monitor unrecorded alcohol consumption (Balasubramani et al., 2021; Baruah et al., 2019; Chakrabarti et al., 2015). This absence of proper policy measures intensifies negative outcomes of alcohol i.e., high alcohol-related prevalence (Balasubramani et al., 2021; Chaturvedi et al., 2019; Saikia & Debbarma, 2020) along with associated health risks(Baruah et al., 2019; Sharma et al., 2016).

Discussion

Cultural Significance of Alcohol Use

The traditional customs and the ethnic practices of Northeast India are deeply rooted (38.9%) in their practice of alcohol consumption, particularly among the Scheduled Tribes (STs) and various ethnic communities as shown in Table 1. The scientific literature emphasizes the importance of homemade and rice-based alcoholic beverages in religious events and social celebrations (Bhattacharya & Deka, 2023; Borah et al., 2021). The culturally significant use of alcohol by ST communities occurs during ceremonial events where they share alcohol (Chaturvedi et al., 2016). The cultural acceptance of alcohol throughout society has transformed it into a central element in regular communal activities and a source of livelihood (Chakrabarti et al., 2015). The high alcohol consumption among Indigenous (65%) and Hindu groups (55.1%) in Arunachal Pradesh (Chaturvedi et al., 2019) demonstrates a widely accepted practice of drinking that goes beyond external influences.

The preference for country liquor persists because people find it easy to obtain and inexpensive (Swargiary, 2023). Traditional brewing practices passed through generations help preserve both identity and heritage. The generational transfer of traditional brewing practices in this region also plays a major role in accelerating alcohol use among adolescents (Saikia & Debbarma, 2020). Community practices revolving around alcohol consumption create an ingrained social system which makes it difficult to cut down alcohol usage since drinking becomes a standard communal activity rather than a personal choice. Effective alcohol consumption interventions must respect cultural practices while developing interventions which support safe drinking practices.

Social Consequences of Harmful Drinking

The changing socio-economic condition influences 72.2% of alcohol use patterns according to Table 1. Research shows that both skilled and unskilled labourers have a higher likelihood to drink alcohol than professionals, highlighting how financial uncertainty, workplace stress and peer pressure serve as key substance use factors (Saikia & Debbarma, 2020). The drinking

ISSN-Online: 2676-7104

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behaviour of adolescents heavily depends on their education level as well as their parents' alcohol consumption habits (Mahanta et al., 2016). Among young marginalized populations, alcohol is often used as a coping mechanism for stress relief, poverty management and unemployment (Singh et al., 2015). Research demonstrates that women consume less alcohol than men within society. The higher concentrated alcohol consumption exists among males yet women's alcohol use responds to stressors in their social life along with economic status and domestic situations (Sharma et al., 2016). Research shows that an improved financial situation leads to lower stress-induced drinking among females (Hussain, 2021). The unregulated market of cheap branded and unrecorded liquor increases vulnerability for alcohol use among specific population segments (Chakrabarti et al., 2015; Mahanta et al., 2016). These alcohol products are socially acceptable thereby heightening neuropathy and gastrointestinal complications and resulting in financial problems (Baruah et al., 2019).

Conclusion

The consumption of alcohol in the Northeastern states of India is a milieu of cultural heritage mixed with socio-economic factors. Traditional societal use of alcohol persists for community bonding and religious events although its excessive consumption among young people, labourers and marginalized groups is a significant cause of concern. Three major factors which drive the alcohol consumption problem in the northeastern regions consist of socioeconomic stress, peer influence and lacking policy regulations. A solution requires a holistic approach which incorporates policies with economic aid accompanied by public awareness to resolve these issues. The region needs to implement a culturally sensitive framework which combines research findings with community participation to minimize alcohol-related negative health effects.

Study Implications:

- The implementation of culturally appropriate interventions must maintain traditional customs while decreasing alcohol-related damages.
- Livelihood opportunities together with economic stability serve as stress reducers that help labourers as well as marginalized individuals decrease their alcohol use.
- The government needs to enforce stronger policies for monitoring both unrecorded alcohol production and the supply channels.
- Educational health programs about alcohol need to focus on youth populations since they report high alcohol consumption rates.
- Support systems should be designed for both men and women to address gender-specific needs.

Study Limitations

This review has yielded many important results for us to take into consideration regarding the socioeconomic implications of alcohol use and the lack of policy regulations in the northeast region. However, certain limitations need to be acknowledged:

• First, the focus of this study was on Northeast India which restricts the results' applicability to other regions with distinct cultural settings.

• Second, we excluded articles which did not mention the keywords, such as 'Social' or 'Cultural', as these are not specific to the objective of the research.

- Thirdly, studies which are published between 2015 and 2024 were included, as we were interested in the current research in the field of socio-cultural impact of alcohol use in the northeast context.
- Fourth, mostly cross-sectional studies were included in the analysis. These studies are helpful, but they are unable to demonstrate causal relationships between variables.
- Finally, the majority of the review's focus was on quantitative data, such as statistics and figures. Including qualitative information, such as firsthand accounts or opinions from the community, could have deepened our understanding of how culture influences alcohol consumption.

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