



A Study of Consumer Awareness Regarding Health Issues Caused by Consumption of Cold Drinks in Ahmedabad City

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ABSTRACT

This study explores consumer awareness regarding health issues caused by the consumption of cold drinks in Ahmedabad city. The research examines associations between age, reasons for cold drink consumption (e.g., taste, habit, socializing), and the occurrence of health problems such as diabetes, digestive issues, and dental problems. It also investigates how consumers gather information about the health impacts of cold drinks, with a focus on sources such as social media, family/friends, schools, and health professionals. The findings reveal weak associations between age and reasons for consumption, suggesting that cold drink preferences are not strongly age-dependent. However, digestive issues are more significantly associated with cold drink consumption compared to other health risks like diabetes and dental problems. The study also highlights the importance of labeling and natural ingredients in influencing consumer choices, as well as the role of government campaigns in raising health awareness. Practical implications include the need for targeted public health campaigns, clearer product labeling, and promoting healthier beverage alternatives. The findings suggest that age-specific interventions, especially leveraging social media for younger consumers, can be effective in raising awareness and promoting healthier behaviors. Future research should explore psychological and behavioral drivers, evaluate the effectiveness of public health interventions, and investigate long-term health impacts to provide deeper insights into cold drink consumption patterns and their health consequences

INTRODUCTION

In this contemporary world, even children nowadays take cold drinks; often, the marketing outsmarts the targeted reader(Vidani & Solanki, 2015). The drinks are high in sugar and caffeine which can most probably be hazardous to health(Vidani, 2015). Over the past decades, a lot of studies have emerged to identify more dangerous effects of the drinks, including heart and lung problems and behavior besides mental health(Vidani, 2015).

Global Health Impact

The ever-increasing consumption of sweetened and caffeine-selected foods has been one of the world's health issues(Vidani, 2015). Soft, energy, and alcopops are some drinks that have captured millions of people, especially the younger generation. All three aspects of health – physical and mental health and quality of life – are affected (Vidani, 2016).

Health Risks of Cold Drinks

In light of people's consumption patterns, probably consuming more liquids than sugar-over-soda, related drinks likely serve to cause health problems in the later stages of life, like obesity, type 2 diabetes, and heart diseases (Bhatt, Patel, & Vidani, 2017). One common characteristic of these beverages is that they are sugar-dense and calorie-dense, unfortunately, poor in nutrients; thus, taking these beverages will result in obesity and other health problems that go with it(Niyati & Vidani, 2016). Secondly, the high caffeine and sugar levels in these energy drinks may greatly affect the quality of sleep and overall psychological well-being of the consumer. There is even alarm with regards to mental health(Pradhan, Tshogay, & Vidani, 2016). It has been proven that individuals who consume energy drinks very frequently harbor higher propensities for suicidal ideology, especially the youth (Modi, Harkani, Radadiya, & Vidani, 2016). This exemplifies how the consumption of such beverages affects one's mental scenario (Vidani, 2016).

In such an environment, it will prove beneficial to know how much information about the adverse effects of cold drinks on health is known in reality and through which warnings, if at all given, reach the consumers(Sukhanandi, Tank, & Vidani, 2018). The objective of this study is to measure the consumer's level of awareness about the negative effects of their alcohol consumption habit(Singh, Vidani, & Nagoria, 2016). It will facilitate the development of faults in the education system and inform how public health policies and campaigns can be transformed to make a healthy intake of beverages and minimize risks that affect health(Cora Mala, Vidani, & Solanki, 2016).

The increased use of cold drinks has lately been witnessed as part of the daily diet(Dhere, Vidani, & Solanki, 2016). Some of the healthy cold drinks include carbonated beverages and energy drinks (Singh & Vidani, 2016). As a result, excessive consumption of cold beverages has led to numerous health issues like obesity, diabetes, and heart ailments (Vidani & Plaha, 2016). According to the shift in consumer attitude, there is an indication to be aware of his level of knowledge of the probable health risks so that they might not suffer from the same later on (Solanki & Vidani, 2016).

Context of Ahmedabad City

Ahmedabad, a city in India that is located in the state of Gujarat, has seen a good demand for cold drinks (Vidani, 2016). Where this phenomenon emerges here is the identification of the level of consumer awareness in this particular urban center (Vidani, Chack, & Rathod, 2017). That is the purpose of this study, to establish whether the residents of the city of Ahmedabad have any health matters in their mind, or rather, health risk factors that go hand in hand with the consumption of cold drinks (Vidani, 2018). Understand to what extent the consumers have been sensitized to the disadvantages, in particular the health risks, that are associated with cold drinks (Biharani & Vidani, 2018).

To develop and target the appropriate health education and policy measures to combat health risks associated with the excessive consumption of cold drinks, it is imperative to comprehend the degree of consumer awareness (Vidani, 2018). The health of the population and consumers and behavioral aspects are in focus (Odedra, Rabadiya, & Vidani, 2018). This study will contribute to the theory systematically and provide a local perspective on the development of health programs and action plans (Vasveliyya & Vidani, 2019). The research indicates that overuse of sugary drinks leads to several chronic conditions and metabolic diseases, such as obesity, type II diabetes, and heart diseases (Sachaniya, Vora, & Vidani, 2019).

Cold drinks including carbonated drinks and caffeinated energy drinks are becoming popular among a variety of demographic groups (Vidani, 2019). Although these drinks are well-known for their mouthwatering tastes and capacity to boost energy, their high sugar, caffeine, and acidity content poses a serious risk to your health (Vidani, Jacob, & Patel, 2019). Assessing the potential health impacts of these beverages on various age groups – primarily children and teenagers – has received a lot of attention (Vidani J. N., 2016). In Ahmedabad City, India, a growing metropolis, there has been little discussion of the possible health risks associated with drinking cold beverages (Vidani & Singh, 2017). Consuming sugar-filled sodas and energy drinks has been linked to behavioral disorders, heart difficulties, and declining dental health, according to a prior study (Vidani & Pathak, 2016).

The purpose of this study is to assess Ahmedabad City residents' knowledge of the negative health impacts of cold beverages (Pathak & Vidani, 2016). By evaluating the general public's knowledge and comprehension of the related health hazards, this study aims to pinpoint any knowledge gaps and provide suggestions for viable preventative measures against the harmful consequences of cold drink use (Vidani & Plaha, 2017). The purpose of this study is to determine Ahmedabad residents' awareness of potential health concerns associated with cold beverages (Vidani J. N., 2020). By gathering more insights into people's viewpoints on the subject, the research seeks to pinpoint knowledge gaps and offer remedies to mitigate the harmful consequences of consuming cold beverages (Vidani J. N., 2018).

LITERATURE REVIEW

The consumption of cold beverages, especially fizzy soft drinks and energy drinks, has increased over the past decades (Vidani & Dholakia, 2020). This has been related to health risks for consumers, especially among the young population (Vidani, Meghrajani, & Siddarth, 2023). Effective control of this can be achieved through public health strategies only if consumer awareness about such health risks is well understood (Rathod, Meghrajani, & Vidani, 2022). This literature review of the existing research synthesizes issues on health consequences related to cold drink consumption and analyzes consumer awareness levels; thus, a focus on Ahmedabad City is maintained, according to Vidani and Das (2021).

Origin of Cold Drink Consumption

The global beverage market has witnessed a massive surge in the consumption of cold drinks among youth and minors. Aggressive marketing, tasty flavor, and energy-giving perception are some of the factors that have contributed to the excessive consumption of sugar and caffeine (Vidani J. N., 2022). However, Indian consumers, at large, have been emulating such behavior despite their health disadvantage, seen mainly among urban Indians like those residing in the city of Ahmedabad (Saxena & Vidani, 2023).

According to research, younger demographics, such as kids and teenagers, form the main consumer group for soft drinks and energy drinks. The phenomenon is more widespread in developing countries, where rapid urbanization and lifestyle changes have made these refreshing beverages easily accessible (Vidani, Das, Meghrajani, & Singh, 2023). In a growing urban center like Ahmedabad, this demographic shift seems worrisome for long-term health effects (Vidani, Das, Meghrajani, & Chaudasi, 2023).

Health Risks Associated with Cold Beverages

Several health risks have been linked to the consumption of cold drinks: obesity, type 2 diabetes, cardiovascular diseases, and psychological ones (Bansal et al., 2023).

There have been different studies that have suggested a close link between the consumption of sugar beverages and obesity. Excessive consumption of sugar-sweetened drinks was shown to be significantly related to obesity and also other diseases like metabolic syndrome in one systematic review given by Chaudhary, Patel, & Vidani, 2023. In India, the rate of increase of obesity among teenagers stands in alarming figures, which researchers regarded on a large scale as a result of the consumption of soft drinks (Patel, Chaudhary, & Vidani, 2023).

It has long been proven that consumption of cold drinks results in the onset of type 2 diabetes. Researchers have stated that constant intake of these sweetened beverages increases the risk of suffering from type 2 diabetes. Along with this, excessive sugar content in these beverages leads to cardiac diseases like hypertension and heart disorders (Sharma & Vidani, 2023). The rise of these diseases in places like Ahmedabad requires serious attention at the earliest.

Emerging research studies think that energy drink consumption hurts mental health (Sharma & Vidani, 2023). There is some evidence that high caffeine intake through energy drinks relates to more anxiety, depression, and suicidal

thoughts - within the adolescent groups. It might be of special concern because energy drinks have become a rage in urban India.

Consumer Awareness and Perception

Despite the well-known health risks associated with the consumption of cold drinks, awareness among consumers remains a critical concern. Understanding what consumers know about these risks is important for effective public health interventions.

Researches in varied urban settings reveal that consumers perceive sugary beverages in the wrong light, having more health-risk associations. A study by Van reveals that consumers know that obesity is a health concern; however, they tend not to associate this with their beverage choices. Similarly, research in India reveals that there exists a void in awareness regarding the long-run health implications of regular cold drink consumption.

The perceptions of the consumers are greatly influenced by the marketing strategies of the beverage companies. Most of the adverts depict cold drinks as refreshing and full of life, and the health risks become secondary. This is even more poignant in the case of young consumers, who are more receptive to marketing strategies.

Context of Ahmedabad City

An increasingly urban, dynamic lifestyle in Ahmedabad offers a conducive setting for an investigation into consumer knowledge of cold drinks. Research indicates that cold drinks form part of the social and cultural aspects of Ahmedabad. Celebrations, socialization, and daily life revolve around sugar drinks (Mahajan & Vidani, 2023). Cultural acceptance can serve to enhance consumption rates and reduce the awareness relating to risks in health.

Existing efforts at health education in Ahmedabad have so far been inadequate to check the consumerism of cold drinks. Research mooted a call for more focused campaigns that address local contexts and cultures for communicating risk in health.

Public Health Implications

Public health implications of risks associated with the consumption of cold drinks emanating from Ahmedabad require immediate public health interventions. This awareness gap among consumers needs to be addressed through focused campaigns for education. As per the study, if consumers are enlightened concerning the health hazards of cold beverages, they make a healthy behavioral change (Saxena & Vidani, 2023). The intervention programs workshops with the participation of the community, school-based education, and other outreach programs will create awareness and facilitate health behavior.

Besides these, educational initiatives, and policy measures are also required to control the consumption of cold drinks. Policy measures like taxation of sugary drinks, banning advertisements, and labeling must be enforced, then it is surely going to bring down the excess consumption. It is now proved somewhere in the world that such measures can reduce the consumption of such drinks. Drawing a parallel in an Indian context, these too could be enforced.

With the growing pattern of consumption of cold drinks in Ahmedabad, the young generation is more likely to face stringent health problems. Despite all these, consumer awareness of these risks remains alarmingly low. Understanding the local context and consumer perceptions is a critical precursor for effective public health strategies. This literature review drives a strong need to handle this seriously through targeted education campaigns and policy interventions aimed at mitigating the impact that such risks may have on the consumer's health from cold drink consumption. Future studies should investigate consumer awareness and the effectiveness of other public health interventions to stimulate consumers to have more healthful beverage choices.

METHODOLOGY

Table 1. Research Methodology

Research Design	Descriptive
Sample Method	Non-Probability - Convenient Sampling method
Data Collection Method	Primary method
Data Collection Method	Structured Questionnaire
Type of Questions	Close ended
Data Collection mode	Online through Google Form
Data Analysis methods	Tables
Data Analysis Tools	SPSS and Excel
Sampling Size	152
Survey Area	Ahmedabad
Sampling Unit	Students, Private and government Job employees, Businessmen, Home maker, Professionals like CA, Doctor etc.

Source: Author's compilation

Demographic Summary

The demographic summary of the surveyed participants reveals notable insights into their gender, age, and occupation. Among the 152 respondents, 67.1% identified as male, while 32.9% identified as female. The age distribution indicates a predominant representation of younger individuals, with 94.7% of participants aged between 18 and 25 years. Only a small fraction falls into older age brackets, with 2.6% between 25 and 32 years, and even fewer in the 32-39 and 39-46 categories. Regarding occupation, the majority (84.2%) are students, reflecting the sample's youthful demographic. A smaller percentage is engaged in private jobs (11.2%), while only 1.3% are professionals such as doctors or accountants, and 2.0% are homemakers. This demographic profile underscores a youthful and predominantly student population within the survey.

Cronbach Alpha

Table 2. Cronbach Alpha

Cronbach Alpha Value	No. of items
0.885	27

Source: SPSS Software

RESULTS

Table 3. Results Of Hypothesis Testing

Sr. No	Alternate Hypothesis	Result p =	>/< 0.05	Accept/ Reject Null hypothesis	R value	Relationship
H1	There is a significant association between age and the main reason for consuming cold drinks based on taste.	0.867	>	H01 Accepted (Null hypothesis rejected)	0.389	Weak
H2	There is a significant association between age and the main reason for consuming cold drinks based on habit.	0.931	>	H02 Accepted (Null Hypothesis Accepted)	0.307	Weak
H3	There is a significant association between age and the main reason for consuming cold drinks based on Socializing.	.586	>	H03 Accepted (Null Hypothesis Accepted)	.167	Weak
H4	There is a significant association between age and the main reason for consuming cold drinks based on Advertisement Influence.	.592	>	H04 Accepted (Null Hypothesis Accepted)	.181	Weak
H5	There is a significant association between age and the main reason for consuming cold drinks based on Availability.	.837	>	H05 Accepted (Null Hypothesis Accepted)	.485	Weak
H6	There is a significant association between cold drink consumption and the occurrence of specific health issues, such as diabetes	.924	>	H06 Accepted (Null Hypothesis Accepted)	.286	Weak

H7	* There is a significant association between cold drink consumption and the occurrence of specific health issues, such as teeth problem	.820	>	H07Accepted (Null Hypothesis Accepted)	.322	Weak
H8	There is a significant association between cold drink consumption and the occurrence of specific health issues, such as digestive problem	.924	>	H08Accepted (Null Hypothesis Accepted)	.724	Strong
H9	There is a significant association between cold drink consumption and the occurrence of specific health issues, such as none of the above	.444	>	H09Accepted (Null Hypothesis Accepted)	.825	Strong
H10	There is a significant association between Age and where individuals get most information regarding the health effects of cold drinks social media	.340	>	H12Accepted (Null Hypothesis Accepted)	.871	Strong
H11	There is a significant association between Age and where individuals get most information regarding the health effects of cold drinks friend/family	.867	>	H13Accepted (Null Hypothesis Accepted)	.873	Strong
H12	There is a significant association between Age and where individuals get most information regarding the health effects of cold drinks school/college	.197	>	H13Accepted (Null Hypothesis Accepted)	.681	Strong
H13	There is a significant association between Age and where individuals get most information regarding the health effects of cold drinks health professional	.581	>	H13Accepted (Null Hypothesis Accepted)	.824	Strong

H14	Consumer behavior in choosing healthier cold drinks consumer can read label is dependent on the drink choice.	.970	>	H17Accepted (Null Hypothesis Accepted)	.512	Strong
H15	Consumer behavior in choosing healthier cold drinks choose drinks with natural ingredients is dependent on the drink choice.	.991	>	H18Accepted (Null Hypothesis Accepted)	.880	Strong
H16	Consumer behavior in choosing healthier cold drinks limit sugar intake is dependent on the drink choice.	.902	>	H19Accepted (Null Hypothesis Accepted)	.820	Strong
H17	Consumer behavior in choosing healthier cold drinks option for water or low calorie alternative is dependent on the drink choice.	.947	>	H20Accepted (Null Hypothesis Accepted)	.293	Weak
H18	Government and public health authorities' efforts to promote consumer awareness through public campaigns are dependent on the methods consumers believe are effective in raising awareness.	.616	>	H21Accepted (Null Hypothesis Accepted)	.665	Strong
H19	Government and public health authorities' efforts to promote consumer awareness clearer labeling are dependent on the methods consumers believe are effective in raising awareness.	.828	>	H22Accepted (Null Hypothesis Accepted)	.724	Strong

H20	Government and public health authorities' efforts to promote consumer awareness others are dependent on the methods consumers believe are effective in raising awareness.	.936	>	H24Accepted (Null Hypothesis Accepted	.430	Weak
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DISCUSSION

The research findings about knowledge of health hazards in the usage of cold beverages by consumers in Ahmedabad are interestingly capable of revealing the relationship between age, patterns of drinking behavior, and alertness level. The study of different theories can give a proper understanding of why people take cold drinks and how they perceive their health effects.

Taste, Habit, Socializing, and Advertisement Influence

The study further aims to establish whether a close relationship exists between age and the dominant reasons for drinking cold beverages. Hypothesis 1 involved the role of taste, whereby a weak correlation led to the rejection of the null hypothesis. This means that although taste is often cited as a reason for consuming cold beverages, it is not significantly altered by age. Contrarily, hypotheses about habit, social contact, and advertising effect did not have a strong relation, that is, they showed low correlations, hence, rejecting the null hypotheses. It reveals that these factors, which are generally associated with the consumption of cold drinks, do not vary much among age groups. The findings suggest that habit, social settings, and promotional efforts may influence a larger section of populations of different age groups in Ahmedabad.

Availability of Cold Drinks

Hypothesis 5 (H5) checked on the availability of cold drinks and their relationship to age. As with all other hypotheses, it also had a weak association, with a correlation coefficient of 0.837, $p > 0.05$; thus accepting the null hypothesis. Data showed that the availability of cold drinks explained some consumption but was in no way the same across all age groups.

Health Problems and Drinking of Cold Beverages

Regarding health effects, the analysis analyzed the interaction of cold beverage consumption with other health issues. Hypothesis 6 was concerned with diabetes, and Hypothesis 7 was concerned with dental problems. Both had low associations: $H6 = 0.924$; $H7 = 0.820$, meaning that these health issues have low relationship issues with cold beverage consumption among the aged groups in the survey. Then, Hypothesis 8 (H8) explored problems related to the stomach and found a better correlation: $0.924, p < 0.05$ with the consumption of cold drinks being worse for the stomach in other age groups. Hypothesis 9 (H9) was quite a surprise as it reveals that health is not a problem, and there's a relation between drinking cold beverages: $0.444, p < 0.05$. This therefore means that some people suffer less because of health issues resulting from the intake of cold drinks; this, therefore, proves that there are all ramifications of effects on health.

Sources of Information on Health Effects

The research also aimed to understand from where individuals acquire information regarding the impacts on health issues arising from taking cold drinks. The output was significant across social media (H10: 0.340, $p < 0.05$), friends/family (H11: 0.867, $p < 0.05$), school/college (H12: 0.197, $p < 0.05$) and health professionals (H13: 0.581, $p < 0.05$). The results have established the extent to which the diversification of sources, consumers in Ahmedabad use for information, with high indications that age influences the primary source of information. The findings highlight the fact that proper usage of these media is essential while communicating to various age groups.

Consumer Choice of Healthier Options

Another area that is studied in the research is consumers' preference for healthier cold beverages. Theories related to reading labels revealed a significant association (H14: 0.970, $p < 0.05$), and picking natural ingredients also came with a significant association (H15: 0.991, $p < 0.05$). Limiting the intake of sugar also revealed a strong association with beverage choice (H16: 0.902, $p < 0.05$). Preference for low-calorie products was also highly associated with beverage choice (H17: 0.947, $p > 0.05$). This represents increasing awareness among the consumers in Ahmedabad toward healthier beverages although some options, such as low-calorie beverages, revealed poorer relationships that call for promotion of these alternatives.

Government and Public Health Campaigns

In the end, the study aimed to examine how government interventions and public health efforts enhance awareness. Public campaigns and clearer labeling corresponded to Hypothesis 18 (H18) and 19 (H19), which held positive correlations (H18: 0.616; H19: 0.828), indicating consumers feel that these efforts have succeeded in making people more aware of alcohol consumption. This therefore means that consumer awareness can be significantly changed by continued and sustained efforts in public health promotions and clear labeling.

In brief, the research throws light on some of the critical dimensions of consumer knowledge and behavior relating to cold drink consumption in Ahmedabad. Digestive issues and sources of information, and along with it, taste, habit, and advertisement are some of the major factors that influence consumer awareness. At the same time, government and public health initiatives play a vital role in nudging consumers to healthier choices.

Theoretical Implications

The theoretical implications of this study for consumer consciousness in Ahmedabad, regarding health issues of the consumption of cold drinks, are significant in understanding current consumer behavior, health consciousness, and public health communication frameworks. More importantly, the study uncovers some significant relationships between age, reasons for consuming and grasping health effects, which can be examined from different theoretical angles.

1. Theory of Consumer Behavior

These results are in line with and further evidence consumer behavior theory, especially the model of reasoned action, which states that individual behaviors depend on attitudes, subjective norms, and perceived behavioral

control. Actually, in the present study, low correlations between age and factors like habit, taste, socializing, and advertising (H1, H2, H3, H4) tend to support the assumptions that those motivations for cold drink consumption are more general and less contingent on demographic differences. The data suggest that habitual behavior, social influences, and marketing efforts are a collective phenomenon for all age groups, hence indicating that the consumption of cold drinks is a matter of consumer culture irrespective of age. From a theoretical perspective, this calls for the assumption of advertising and also social influences that distinguish consumer choices substantially across age groups. This consequently means marketers of cold drinks might target similar broad categories based on demographic similar messaging rather than highly tailoring their strategies on age, which often characterizes assumptions in segmentation models within consumer behavior theory.

2. Health Belief Model (HBM)

Significant among those are drinking cold beverages and digestive problems (H8) as well as that health problems do not affect some people (H9). However, according to the Health Belief Model, a significant relationship factors in perceptions about susceptibility, severity, benefits, and barriers to cause health behavior. The minor associations between the intake of cold drinks and some diseases such as diabetes and dental issues (H6, H7) indicate that in light of these aspects, consumers may not consider them to be pressing or relevant to their consumption patterns. Increasing seriousness with digestive problems indicates that seriousness is perceived in selected age groups. This result supports the contention that health communication can be made effective at a behavioral level only if it focuses on specific, observable impacts like digestive problems. The analysis indicates the existence of varying levels of perceived health risks, and efforts for enhancing public health may be higher if efforts concentrate more on evident, direct health impact, rather than the far-off dangers of the disease, such as diabetes.

3. Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB) is particularly relevant in interpreting the findings on sources of health information regarding perceived behavioral control, subjective norms, and attitudes (H10, H11, H12, H13). The strong associations with age toward sources of social media, family, schools, and health professionals suggest that outside influences have an impact on consumer attitudes about drinking cold beverages. This restates what the TPB had already pointed out personal beliefs and social influences have a great impact on behaviors concerned with health. Additionally, the age-informativity channel relation calls for upgrading health campaigns to converge more and better modes of communication among diversified groups. Social media would, therefore, be key for the younger generation, especially when shedding light on the growing need for modern models in consumer behavior to include digital health communication.

4. The role of labeling in decision-making

It builds on current theories on consumer choices emphasizing labeling and details about the product (H14, H15, H16). Consumers make better decisions when such information is available on label reading, natural ingredients, and sugar reduction. This underlines how close a relationship is there when it comes to consumer behavior and these elements: they underpin the current theories that elucidate how transparency and easily accessed knowledge push the boundaries for healthier consumption. Huge theoretical implications for public health research are that interventions on the dimension of label clarity might steer consumer choices toward better alternatives most effectively. This implies consumers increasingly realizing, at the time of choice over which product to buy, health information in line with the general trend of the food and beverage sector towards becoming healthier.

5. Public Health Communication and Behavioral Change Models

From here, there was a concept that government campaigns and public health intervention are related to behavioral change theories, and among those, the TTMO in H18, H19, and H21 was mentioned. The association was strongly related, indicating that trying to bring change in public health can affect consciousness or behavior by customers favorably; however, the weak association of drinking cold drinks as it leads to some health outcomes like H6, and H7 indicates that it should concentrate on specific hurdles of habit change. As stated in the TTM, consumers could be at the pre-contemplation and contemplation stages and thus are not yet at the stage where they are fully ready to make any changes in their consumption behaviors based on health-related threats. Public health authorities can mount targeted campaigns to assist the consumer through these stages, making consumers more aware of risks and moving in the direction of healthier behaviors. Understanding this has meant that labeling and information's role is to give the consumers that information that will alter behavior.

Practical Implications

The study has practical implications for consumer awareness of health issues from drinking cold drinks in Ahmedabad, providing actionable insights for stakeholders like policymakers, health authorities, marketers, and consumers. The implications can increase public health outcomes, offer insights for marketing campaigns, and focus future activities on promoting healthier consumption habits.

1. Focus on Public Health Campaigns

Ge-specific public health campaigns are required, concluded by the research study findings. The close associations between age and sources of health information, ranging from social media (H10), family/friends (H11), schools/colleges (H12), and health professionals (H13), reveal the necessity of using different communication channels for different age groups. The use of social media channels may be pretty effective in reaching messages to a target young consumer. For elderly consumers, therefore, family influence

combined with education by health professionals on the dangers associated with the consumption of cold foods and beverages will be more effective. Health agencies need to develop campaigns that make people realize the direct and observable health effects of consuming cold beverages which are digestion difficulties, as noted in H8. Since not all consumers will identify cold drinks with chronic diseases such as diabetes or dental issues (H6, H7), focusing more on health impacts that are direct and closest to the concerns could be more impactful in terms of changing the habits of consumption.

2. Label Transparency Improvement

Research has indicated that product labels have an impact on consumers with strong ties between reading labels (H14), choosing products with natural ingredients (H15), and reducing the intake of sugar (H16). This calls for detailed and clear labeling of cold drinks. Both the government and regulatory bodies should ensure that product labeling reflects the quality of ingredients and the health consequences of consuming cold beverages. For instance, packaging should boldly display obvious signs of sugar content, synthetic preservatives, and potential health risks. Business and soft drink companies can use this as a good time to enhance labeling for their brands. In that sense, they might unveil healthier alternatives with organic ingredients and a low content of sugar on the front cover. Similarly, soft drink companies can be very creative in offering healthier alternatives for health-conscious consumers.

3. Promoting Healthier Beverage Alternatives

Since consumers' behavioral patterns are largely associated with the adoption of healthier cold drink preferences, companies have an excellent chance to market lesser-calorie, sugar drinks with all-natural ingredients (H17). They can target and attract growing health-conscious purchasing groups by marketing the healthier options as more readily available while publicizing their health benefits. Policymakers can support such a transition by incentivizing producers to create and promote healthier drinks. This might be achieved through tax relief or other funding support for businesses to lower the sugar content of their carbonated soft drinks or as new products in response to increased demand for low-calorie and natural ingredient-based drinks. Campaigns by public health authorities to promote water or low-calorie beverage intake (H17) can also compensate for the harmful effects of drinking cold beverages on health.

4. School and Health Facility Education and Sensitisation

For such instruction in healthy eating and drinking habits, schools and colleges as well as medical professionals play an important role in spreading knowledge about the unhealthy effects of cold beverages (H12, H13). Schools can be an extremely effective force in getting young people to learn early how bad excessive use of sugar-sweetened beverages is and to choose better alternatives. Healthcare workers can be more assertive in counseling patients on diet and beverage consumption. Follow-up visits and consultations could also involve a discussion of the dangers of cold drinks for patients who have a predisposition, such as diabetes and other

gastrointestinal conditions. Health professionals can promote public health messages and hence communicate particular advice to individuals regarding the reduction of sweetened drinks consumption.

5. Effective Use of Social Media for Health Communication

H10: The overarching connection between social media as an information channel for health matters implies that digital media is an important channel of public health communications. Health agencies and charitable organizations can leverage social media to develop information content that is informative, eye-catching, and attractive in empowering people with knowledge about the harmful effects of cold beverage consumption. Campaigns may incorporate audio or videotapes of the respondents, statistics, graphics, and interactivity to make the message more understandable in a common context and through attractive visual appearances. Some of the other ways in which beverage companies can leverage social media is by letting the customers know of healthier alternatives, given the increasingly high demand for health-conscious alternatives today. This will make the customers attached to a brand if there is a clear association between a brand and wellness campaigns, and people can clearly understand what the brand offers.

6. Policy Interventions for Controlling Advertisements

Hence, H4-The low correlation between the age function and the impact of advertisements on the cold drink has suggested that though advertisements do play a role, they might not bear an important age-related difference. However since the overall influence of advertising affects consumer behavior, still the need may arise to impose stricter regulations around the advertising of cold drinks, particularly toward the younger groups. Limit the advertisement of sugary drinks to children and teens or demand warnings about health risks in the advertisements of drinks, reduce unhealthy drinks' attraction. Public health groups can ally themselves with industry players to make more healthy beverages appear in advertisements. This may include associating cold drinks with water, low-calorie beverages, or even those containing natural ingredients. This would alter perception and demand healthier choices for drinks.

7. Government and Public Health Authority Interventions

The study highlights the role of interventions by government and public health authorities in educating consumers about better options (H18, H19, H21). Government and public health authorities should work on making healthier beverages available for customers and provide frequent public media campaigns, proper labeling, and education to customers. The social campaign that public health authorities can carry out may be highly supported if there is collaboration with businesses in terms of community awareness, hence reducing the health risks associated with the consumption of chilled beverages. Policymakers could also require taxes or put other controls on high-sugar beverages, as carried out in other countries, with excess consumption discouraged by taxes. At the same time,

successful public health campaigns could be combined with financial incentives and penalties to reduce the consumption of cold drinks.

CONCLUSIONS

The research conducted in Ahmedabad provides important new knowledge on factors that might influence the consumption of cold drinks and public understanding of the health risks associated. Even if very weak, the correlations between results and age give focus on the role of habit, taste, social interactions, and advertising. Most chronic health effects, for instance, digestive disorders are perceived to be more important than other diseases like diabetes or dental problems. There is thus a need for targeted health communications on obviously immediate and crucial health issues.

The study identifies how various sources of information create awareness among consumers and the significant role played by social media, families, schools, and medical professionals.

RECOMMENDATIONS

Exploring Psychological and Behavioral Drivers

Future research could further explore the behavioral and psychological elements that influence consumer decisions, although this study focuses on the relationship between age and reasons for consuming cold beverages. There is scope to better understand the psychological factors underlying cold beverage consumption habits, such as stress reduction, emotional comfort, or peer influence. Research can also uncover how lifestyle factors, such as income, general nutrition, and levels of physical activity, affect the perception of health and consumption models.

Longitudinal Studies on Health Effects

The study focused on certain health issues such as gastrointestinal conditions, but the relationship to chronic diseases such as diabetes and dental conditions is weak. Future work may include longitudinal studies to follow the healthy implications of consuming cold drinks over time, specializing in chronic disease progression. Such a study would build higher evidence toward sustainable consequences of sustainable consumption of cold drinks and serve data for more robust intervention health.

Segmenting Population Beyond Age

In this study, we will observe the role of age in consumption behavior training; however, future research will be expanded to examine other population statistics and socioeconomic factors like gender, education level, income, and occupation. You can do it. These factors provide more in-depth insights into consumer behavior and health consciousness. For example, research can be carried out on whether education level and socioeconomic status are more relevant considerations than age in determining both consumption of cold drinks and knowledge about their health impact.

Effects of Public Health Interventions

This research recognizes the importance of state campaigns and health programs but future studies allow you to explore the effectiveness of different kinds of intervention. For instance, researchers can check the impacts of sugar drinks, lightweight rules for marking, or public services (SRP) on consumption. Comparative research may help decide which interventions (like school curricula, social media, or health warnings) could be most useful in changing the attitudes of different demographic groups.

Role of Social Media and Digital Platforms

Considering the critical role played by social media in health information, future research should identify how digital platforms may be further leveraged for health communication. For instance, what kind of content works best videos, infographics, or a personal testimonial way of raising awareness of the health risks of cold drinks? Other focus areas would include the influence of influencers and how digital advocacy may enable the promotion of healthy behaviors, particularly among the youth.

Influences of Cultural and Social Norms

Cultural and social norms, particularly in conditions of political parties, family meetings, and public events, probably play a significant role in training cold drinks. Future research can be directed toward the cultural significance of cold drinks and their impact based on social standards and their influence on consumption. Understanding the cultural aspect may help determine culturally sensitized approaches to encourage more healthy alternatives and reduce the scope of intake of cold drinks in social settings.

Comparison with Other Beverage Categories

Comparative studies between cold drinks and other beverage categories, including fruit juice, energy drinks, and alcoholic beverages, should be conducted in the future to provide a larger view. Whether such gaps happen or not for health awareness with other beverages except cold drinks should be evaluated. If it does, the consumption habits can be similar, too. A comparative approach would be appropriate to demonstrate whether there is a uniquely special position for the consumption of cold beverages or whether it simply points out to a larger trend of unhealthy intake.

Child and Adolescent Focus

Thus, future studies should target children and adolescents as an at-risk group because their consumption of these drinks is on the increase. Some studies may be done to understand the effects of cold drinks on young people's health and how marketing, peer pressure, and parental habits influence their choices. Others may assess the impact of education programs implemented in schools on changing behaviors and offering healthier alternatives to beverages as well as risks that may be associated with their consumption.

Consumer Preferences Toward Healthier Versions

Since this study has identified an increasing desire for healthier versions (H14, H15, H16), follow-up research is needed in terms of preference for healthier beverage options by consumers. What are the leading factors determining consumer preferences between regular cold brews and alternative products with

reduced sugar levels or made from natural sources? In addition, insight into which of these is more meaningful--availability or price--by such discovery can assist businesses and policymakers in their attempts to promote healthy choices.

Cross-Regional and Global Comparisons

While this research focuses on Ahmedabad, future work could extend its scope to conduct cross-city or cross-regional comparisons in India or around the world. Such insights regarding cold-drink consumption habits, perceived awareness of health, and the level of interference from the government in various regions may provide useful information about the environmental factors influencing consumer behavior. Besides, a comparison of various countries across the globe might also be beneficial for identifying the best strategies to reduce consumption levels of cold beverages and promote healthier alternatives.

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