Effect of Social Media Advocacy against Excessive Sugar Intakes on Knowledge and Belief of Health Risks, and Consumption of Sugar Sweetened Beverages among University Students

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Abstract:
This article examined the effect of social media reduction of sugar intakes campaigns on consumption of soda drinks among university undergraduate students in Federal University, Oye-Ekiti. The objectives include; to determine the level of students' exposure to social media campaigns against excessive sugar intakes via consumption of SSBs, assess the level of knowledge of health risks associated with consumption of SSBs, find out students' belief regarding the health risks associated with consumption of SSBs, and examine the level of SSBs consumption among the university students. The study employed a cross-sectional survey method, using an online questionnaire as instrument for data collection. The instrument was shared to identified social media platforms used by students in 13 faculties in Federal University, Oye-Ekiti. Purposive sampling method was employed in selecting the first 30 responses submitted from each faculty for analysis. The results showed high level of exposure to social media campaigns against excessive sugar intake, especially through the Facebook platform, but many respondents seldom read the text or watch the videos to the end. As a result, there is poor knowledge and negative beliefs about the health implications of sugar sweetened beverages consumption among the sampled respondents. However, the results of the inferential statistics suggest statistically significant relationships between exposure to social media campaigns against excessive sugar intakes and students' knowledge and belief of the associated health risks, and consumption of sugar-sweetened beverages at $p<0.05$. Based on the findings, the study concludes that social media can serve as viable platforms for the campaign for low sugar consumption among young people. Thus, the study recommended that social media content creators should encourage followers to read or watch posts on reduction of sugar intakes to the end to boost understanding and informed decision-making. Healthcare workers should leverage the social media platforms to provide more information on the health implications of excessive sugar intakes. Social media influencers and patients could share personal experiences to promote positive beliefs about the health implications of excessive soda consumption, and university management should implement intervention polices such as partial restriction or outright ban on sugar-sweetened beverages exceeding the recommended average per bottle, and promote healthier alternatives to sugar-sweetened drinks in university campuses.

Keywords: **Excessive Sugar Consumption, Health Belief, Media Advocacy, Social Media, Sugar Sweetened Beverages**

1. Introduction

Sugar-related diseases remain a huge threat to the attainment of Sustainable Development Goal 3 target no 4, which aims at eliminating non-communicable diseases by 2030. The trend in sugar consumption, particularly through Sugar-Sweetened Beverages (SSBs), has become a significant public health concern, given the well-documented health risks and non-communicable diseases associated with high sugar intake. Sugar, particularly in the form of added sugars found in SSBs has been linked to various health issues, including increase body weight and obesity.[1] (Akinbule, Adenusi & Olurin, 2024), insulin resistance and type 2 diabetes (Drouin-Chartier et al., 2019; Ma et al., 2023), metabolic disorders, dental caries, and dental erosion (Te et al., 2019), gout (Choi & Curhan, 2008; Choi et al., 2010), bone problem and liver cancer (Zhao et al., 2023), heart diseases (Te Morenga, Mallard & Mann, 2013; Yang et al., 2014; Sánchez-Pimienta, et al., 2016), and associated deaths (Ma et al., 2023). Consequently, the World Health Organization (WHO, 2020) recommends that added sugars should comprise less than 10% of total daily caloric intake with additional benefits for intakes less than 5% (WHO, 2015). However, sugar consumption through SSB constitutes 24% of added sugar (American Heart Association, 2025), and Nigeria ranks among the fourth globally in the SSB consumption, with an annual sale of approximately 38.6million liters in a market valued growth rate of 16.63 percent in 2023 (Corporate Accountability and Public Participation Africa, 2024) and the largest consumer in Africa (Adebowale-Tambe, 2025).

Policies such as taxes on sugary beverages have been adopted in various countries to combat the rising sugar consumption

rates including Nigeria (Sholeye, Akinyemi & Oyewole, 2022; Alothmani, & Almoraie, 2023). Nigeria's sugar tax was signed into law as part of the 2021 Finance Act. Ten Naira (₦10) was added to each litre of all non-alcoholic and SSBs (Sholeye et al., 2022). The policy was aimed at deterring the consumption at the same time generate revenue for health initiatives (NCD Alliance, 2022). However, SSBs consumption has continued to rise as Nigerians are consuming more and more sugary drinks (Sholeye et al., 2022; Akinbule, Adenusi & Olurin, 2024; Adebowale-Tambe, 2025).

Students are major consumers of SSB drinks around the world, including Nigeria (Akinbule, Adenusi, & Olurin, 2024). Since social media emerged as powerful communication and marketing tools, particularly for products targeted at younger demographics, SSBs producers and advertisers employ the social media marketing strategies in promoting sugary drinks as trendy and desirable to young consumers (Brownbill, Miller & Braunack-Mayer, 2018). As consumption continues to rise with its resultant sugar-related health problems, advocacy for behaviour change became imperative. Therefore, social media platforms (You Tube, Facebook, Instagram, Twitter, TikTok etc.) which have become integral to young people's lives are also utilized as advocacy channels to promote awareness about sugar contents of SSBs and discourage its excessive consumption among young people.

Social media platforms provide a space for public health organizations to share research findings and health guidelines related to sugar intake, providing the opportunity for people to share personal experiences and support community for making healthier choices. Content creators on these platforms have used engaging visual storytelling strategies, influencer partnerships (collaboration with popular figures who advocate for healthy living) and interactive elements that resonate with young people such as polls, quizzes, and discussions to draw attention to sugar-related messages and encourage active participation in the interactions. Moreover, social media campaigns sometimes incorporate challenges (e.g #SodaFreeChallenge, #NoSodaChallenge) to encourage participation and create a sense of community among participants. Some of the notable campaigns encouraging abstinence from SSBs for a period, with participants sharing their experiences, health improvements, and alternative beverage choices. Thus, the challenges not only serve as sources of information but also as spaces for social interaction on dietary habits among peers.

However, little is known about the effects of the social media advocacy against excessive sugar intakes particularly via SSBs among young people. Again, studies investigating the effects of such campaigns on SSBs consumption among students who are among the major consumers are limited. Ekiti state has been reported to have a high prevalence of diabetics, which is a sugar-related disease (Oluwadiya et al., 2023). However, there is no existing study (to the best of the researchers' knowledge) examining the effect of social media campaign against excessive sugar consumption on knowledge of health risks associated with SSBs, belief in the health risks associated with SSBs, and SSBs consumption patterns among the student population. Therefore, this study aimed to fill this gap in knowledge.

Research Questions

1. What is the level of students' exposure to social media campaigns against excessive sugar intakes via consumption of SSBs?
2. What is level of students' knowledge of health risks associated with consumption of SSBs?
3. What is the students' belief regarding the health risks associated with consumption of SSBs?
4. What is the level of SSBs consumption among the university student population?

Study hypotheses

1. Exposure to social media campaigns against excessive sugar intakes has no significant correlation with students' knowledge of health risks associated with consumption of SSBs.

2. Exposure to social media campaigns against excessive sugar intakes has no significant correlation with students' belief regarding the health risks associated with consumption of SSBs.

3. Knowledge of SSBs associated Health Risks has no significant correlation with SSBs consumption patterns among the university student population.

2. Literature Review

Sugar Sweetened Beverages and Related Health Risks

Soda otherwise known as soft drinks or sweetened carbonated beverages have become indispensable drinks across the globe. They vary in form, taste and volume in almost all regions of the world. They have gained popularity and widespread consumption due to aggressive marketing strategies employed by producers and advertisers, often portraying SSB drinks as trendy and desirable, influencing purchasing decisions (Idumah, et al., 2020), relatively low cost and accessibility (Engwa, et al., 2015; Idumah, et al., 2020), social and cultural influences and urbanization.

Several studies have shown the correlation between sugar sweetened drinks and health problems such as obesity (Akinbule, Adenusi & Olurin, 2024), insulin Resistance and Type 2 diabetes (Drouin-Chartier et al., 2019; Wattelez et al., 2019; Miller at al., 2022; Pramanik, 2024), dental problems including cavities, enamel erosion and tooth decay, particularly among children and adolescents who consume these beverages frequently (Te al., 2019), metabolic disorders, gout (Choi & Curhan, 2008; Choi et al., 2010), bone problem and liver cancer (Zhao et al., 2023), heart diseases (Te

Morenga, Mallard & Mann, 2013; Yang et al., 2014; Sánchez-Pimienta, et al., 2016) and associated deaths (Ma et al., 2023).

Past studies on students are heavy consumers of soda drinks around the world, including Nigeria (Salim, & Ali, 2020; Sholeye et al., 2022; Akinbule, Adenusi & Olurin, 2024) and many students were not fully aware by the health hazards associated with soft drinks (Salim, & Ali, 2020). Efforts to educate students about the health implications of excessive SBBs consumption include social media advocacy campaigns aimed at behavior change.

Social Media Campaign against Excessive Sugar Consumption

Social media are means of interactions among people in which individuals create, share, or exchange information and ideas in virtual (online or cloud-based) communities and networks. Engagement metrics, such as likes, shares, and comments, indicate the effectiveness of social media content. Kearney, et al., (2024) opine that social media campaign achieve high impressions, through reels and content featuring influential people had higher engagement. Social media campaigns that utilize eye-catching visuals and relatable messaging tend to generate higher engagement rates.

Social media has transformed the way health information is disseminated and consumed. It allows for real-time communication and interaction, making it an ideal platform for public health campaigns focused on sugar-related diseases. By leveraging these platforms, campaigns can reach a broader audience, foster a culture of health awareness and enable campaign implementers to receive immediate feedbacks and help refine messaging to better meet the needs of the target populations.

The use of social media for campaigns addressing sugar-related diseases has gained significant traction in recent years. These platforms offer unique opportunities to engage audiences, particularly younger demographics, in discussions about health risks associated with excessive sugar consumption (Te et al., 2019; Bradly et al., 2020; Gudzune et al., 2020). Examples of such campaigns are #SugarSmartCity that utilized social media to engage communities in discussions about sugar consumption and its health impacts through dedicated events, aimed at reducing obesity rates and improve overall health. "'Sugary Drinks Tax Campaign" used social media to compliment the mass media messages, highlighting the health risks of sugary beverages, educating the youths on how these beverages contribute to obesity, diabetes and other health problems. Another example is the #SugarAwarenessWeek campaign that focused on raising awareness about "free" sugars in beverages and foods, using quizzes and interactive posts to engage users. In addition, Rethink Your Drink campaign on Facebook encourages young people to replace sugary drinks with water, highlighting the benefits of hydration.

Social media influencers amplify the reach of these messages as they share the dangers of excessive sugar consumption to their followers. For example, "Drink Water, Not Soda" Campaign - Cristiano Ronaldo', is more likely to be trusted and followed than traditional health messages. In addition, social media platforms allow for tailored messaging that resonates with specific audiences enabling campaigns to reach different age, interests, and behaviours, and receive immediate feedback from audiences when participants in #challenges share their progress and tips, creating a supportive environment that promoted healthier habits. By providing relevant and impactful messages, the campaigns can raise awareness about the link between SSBs consumption and health issues such as obesity and diabetes, and can result in behaviour change (reduction in consumption and increased use of healthier alternatives like water and natural juices).

Social media fosters a sense of community among users. Community interactions enable youths to share experiences and support each other in making healthier choices. By utilizing engaging content, influencer partnerships, and community-building strategies, these campaigns can effectively raise awareness and promote healthier behaviors.

While social media campaigns offer numerous benefits, they also face challenges in the fight against excessive sugar consumption. First, misinformation and conflicting messages from the beverage companies and other individuals, lead to confusion about dietary choices. For example, Moura and Aschemann-Witzel (2021) explain the "sugar dilemma" expressed on social media when they opine that sugar consumption appears as a two-sided experience, sometimes dangerous, sinful and addictive, but also comforting and delightful. Secondly, maintaining audience interest over time can be difficult. Thus, information sources need to continuously innovate and adapt their strategies to keep the conversation alive. Moreover, changing dietary habits can be challenging due to established preferences and social norms influencing beverage choices, which may influence change to healthier options. Therefore, campaign effectiveness can vary based on the campaign planners' ability to provide accurate and evidence-based information, audience engagement and the ability of the messages to improve knowledge, and stimulate positive belief about health risks and behavior change among the message recipients.

Effectiveness of social media campaigns on knowledge of health risks and reduction of SSBs consumption

While many studies that investigated the association between knowledge of health consequences and consumption of sugary drinks show no significant effect on consumption of SSBs, a few studies indicate otherwise. Lundeen et al., (2018), Hunter et al., (2024) and Pramanik (2024) found that knowledge of SSB-related health conditions had no association with SSB intake. Likewise, Chia-Wen and Duan-Rung's (2022) findings suggest that SSBs consumption was associated with self-efficacy, perceived barriers and perceived benefits but knowledge of SSBs was not associated with SSB consumption. Conversely, Wattelez et al., (2019) indicated that SSB-related knowledge is somewhat associated with SSB consumption. Park et al., (2020) found that intake of SSBs ≥1 time/day was significantly higher among adolescents who lacked knowledge of the associated health risks. Likewise, Miller et al., (2022) report that participants reporting tooth

decay, weight gain, heart disease and diabetes as health effects of soda were lower consumers of soda ($P < 0.001$).

Various studies that examined the effectiveness of social media campaigns on reduction of sugar intakes show positive outcomes. According to Vandormael et al., (2021) audience exposed to a video explaining the implications of excessive sugar intake had significant higher behavioural intentions to reduce daily intake of added sugar and check food labels for sugar content. Bradley et al., (2020) who examined the effectiveness of the "Sugar Smart" campaign, found that the campaign had a positive impact in reducing sugars intake, but significantly decreased immediately after the campaign and identified barriers to sustenance include time constraints, normalisation of sugary treats, and confusing information. In the same vein, Gudzune et al., (2020) reported that a network-oriented intervention to decrease added sugar intake by encouraging reduced SSB consumption resulted in significant decrease in added sugar intake.

The extant literature reviewed show that studies have been conducted to examine the impact of knowledge of SSBs health implications on consumptions abound but the effects of social media campaigns on knowledge of health risks, as well as its effect on belief and SSBs consumption patterns among students particularly in Nigeria are scarcely documented in literature. Thus, the existing knowledge gap is what this study sought to fill.

Theoretical Framework

This study employed the Health Belief Model as its theoretical basis.

The Health Belief Model (HBM) is a social psychological interpretation of health-related behaviour change that emphasizes the prediction of health behaviours based on individuals' beliefs and attitudes. The HBM highlights six concepts that predict health-related behaviour. These six concepts-perceived susceptibility (individual evaluation of the propensity of contracting a disease), perceived severity (individual judgment about of the seriousness of a health problem or the consequences of not treating it), perceived benefits (personal judgment about the gains or outcome of recommended health action), perceived barriers (personal perception of the cost, harm, pleasantness, time, or convenience associated with the executing recommended action), cue to action (the stimulus required to initiate the decision-making process -accepting a recommended health action e.g personal feelings, counsel from others people, illness of close person, newspaper publications about the disease etc.) and self-efficacy (confidence in ones capacity to successfully undertake a behavior), interact to predict health-related behaviours (Author, 2023).

In the context of this study, the health belief model aims to explain the effect of awareness of the health risks associated with SSBs on belief and consumption habits among students. Therefore, awareness of the negative effects of SSBs could improve knowledge of the health consequences. Perceptions of vulnerability to health hazards and their severity could impact students' beliefs in health issues associated with SSBs and consumption patterns. Also, students are more likely to reduce sugar intake if they think that such actions will lessen the likelihood or intensity of sugar-related diseases. However, the challenges (perceived barriers) connected to reduction in SSBs consumption such as peer pressure, taste and others, may hinder them from taking the desired actions. In addition, outside factors (cue to action) that encourage people to safeguard their health such as personal experience, close contact to patients suffering from sugar-related diseases, access to the health experts' information are expected to influence the SSBs consumption patterns. Therefore, knowledge of the health hazards associated with excessive sugar intake can function as a strong cue to action, encouraging students to stop excess intake of SSBs.

3. Materials and Methods

This study employed the quantitative approach, using a cross-sectional survey method to gather data on from undergraduate students in Federal University, Oye-Ekiti. Ekiti state, South-west, Nigeria. The institution was purposively selected due to absence of empirical data regarding the effect of social media sugar reduction campaigns on soda consumption among the students. The undergraduate students' population in the current 2024-2025 session stands at 43, 000 (FUOYE Website population, 2025). However, the survey participants consisted of only students who have social media accounts and are active on more than one platform for the past 6 months at the period of the investigation. This population could not be ascertained. Therefore, the sample size was determined using the Cochran formula [(1.96)2(0.5) (0.5)/ (0.05)2] for determining sample size for the infinite population in cross-sectional studies/surveys (Author, 2022). The calculation yielded a sample of 384.

Structured questionnaire with multiple choice and Likert scale questions was designed with a Google form. A pretest of the instrument was conducted using 30 participants (representing 7.8% of the sample size) and the split-half test conducted to measure the statistical reliability of the research instrument shows a co-efficient of 0.967, implying that the instrument was reliable.

The questionnaire was distributed through online faculty platforms for full-time undergraduate students to access them, respond and submit within a short time. This method saved time and cost. However, there was no limit to the number of students who received and responded to the questionnaire. Hence, more than the required sample size was submitted. Data collected were retrieved in excel form and purposive sampling method was used to select the first 30 responses submitted from each faculty. This yielded 390 responses used for analysis. The respondents' demographics variables show that female respondents are slightly more than the male respondents (51.7%) that participated in this study. Most of (60%) of the respondents are between 21-25 years, single (77.9%), and very active social media users (88.7%) everyday usage. As such, the likelihood of the respondents' exposure to social media advocacy campaigns for reduction of sugar intake was high.

The sorted data were then coded into the Statistical Package for the Social Sciences (SPSS) to ensure accuracy, presented

in simple percentage tables and interpreted through the descriptive method, whereas Chi-square test was used to draw inferences on the stated hypotheses, using the decision rule of $p<0.05$.

4. Results

Exposure and engagement with social media campaigns against excessive sugar intakes via consumption of SSBs

The results show that 348 out of the 390 respondents (representing 89.2% of the sample) were exposed to the campaigns against excessive sugar intakes through a variety of social media platforms including Facebook (24.6%), Instagram (8.5%), Telegram (8.9%), TikTok (13.1%), Twitter (5.4%), WhatsApp (15.4%) and YouTube (13.3%), but Facebook ranked the highest channel of exposure (24.6%). However, the extent of exposure to social media content on reduction of sugar intake was low as 38.2% were rarely exposed, 33.6 were exposed to a large extent, 17.4% to a very large extent and 10.8% were never exposed to such content. Moreover, some level of engagement with the content was observed as 19.2% commented, 12.8% liked and 12.6% shared the posts but only 20% played video /read text to the end, and 24.6% skipped the posts.

Students' knowledge of health risks associated with consumption of SSBs

Table 1: Respondents' level of knowledge of health issues associated with soda drinks

Excessive drinking of sugary beverages like soda causes excess weight gain and obesity		
Responses	**Frequency**	**Percentage %**
Not applicable	42	10.8
Strongly Disagree	78	20.0
Disagree	86	20.1
Uncertain	91	23.3
Agree	54	13.8
Strongly Agree	39	10.0
Total	390	100.0
Excessive drinking of sugary beverages like soda causes diabetes		
Not Applicable	42	10.8
Strongly Disagree	43	11.0
Disagree	31	7.9
Uncertain	44	11.3
Agree	122	31.3
Strongly Agree	108	27.7
Total	390	100.0
Excessive drinking of sugary beverages like soda causes heart problems		
Not Applicable	42	10.8
Strongly Disagree	73	18.7
Disagree	66	16.9
Uncertain	76	19.5
Agree	84	21.5
Strongly Agree	49	12.6
Total	390	100.0
Excessive drinking of sugary beverages like soda causes teeth problems		
Not Applicable	42	10.8
Strongly Disagree	88	22.6
Disagree	75	19.2
Uncertain	87	22.3
Agree	54	13.8
Strongly Agree	44	11.3
Total	390	100.0
Excessive drinking of sugary beverages like soda can cause high blood pressure		
Not Applicable	42	10.8
Strongly Disagree	68	17.4
Disagree	63	16.2
Uncertain	133	34.1
Agree	51	13.1
Strongly Agree	33	8.5
Total	390	100.0
Excessive drinking of sugary beverages like soda can cause cancers		
Not Applicable	42	10.8
Strongly Disagree	28	7.2
Disagree	36	9.2
Uncertain	131	33.6
Agree	84	21.5
Strongly Agree	69	17.7
Total	390	100.0
Rate your knowledge about the health implications of excessive drink beverages like soda		
Not Applicable	42	10.8
Very Low	53	13.6
Low	107	27.4
Moderate	99	25.4
High	56	14.4
Very High	33	8.5
Total	390	100.0

Source: *Researchers' Field Work June 2025*.

The data in Table 1 suggest that most respondents in this study are uncertain that excessive drinking of sugary beverages like soda causes excess weight gain and obesity, heart problems, teeth problems, blood pressure and cancers. However, majority of the respondents affirmed that excessive drinking of sugary beverages like soda could cause diabetes. The data suggest poor knowledge of the health implications of excessive soda consumption. In confirmation to this result, most respondents indicate that their level of knowledge about the health implications of excess intake of sugary drinks is low, highlighting the need for more advocacy campaigns.

Students' belief regarding the health risks associated with consumption of SSBs

Table 2: Respondents' level of belief in the health issues Associated with soda drinks

To what extent do you believe that excessive drinking of sugary beverages like soda causes excess weight gain and obesity?		
Responses	**Frequency**	**Percentage %**
Not Applicable	42	10.8
Very large extent	67	17.2
Large extent	63	16.2

Rarely	120	30.8
Never	98	25.1
Total	390	100.0
To what extent do you believe that excessive drinking of sugary beverages like soda causes diabetes?		
Not Applicable	42	10.8
Very large extent	157	40.3
Large extent	97	24.9
Rarely	54	13.8
Never	40	10.1
Total	390	100.0
To what extent do you believe that excessive drinking of sugary beverages like soda causes heart problems?		
Not Applicable	42	10.8
Very large extent	48	12.3
Large extent	53	13.6
Rarely	146	37.4
Never	101	25.9
Total	390	100.0
To what extent do you believe that excessive drinking of sugary beverages like soda causes teeth problems?		
Not Applicable	42	10.8
Very large extent	43	11.0
Large extent	57	14.6
Rarely	98	25.1
Never	150	38.4
Total	390	100.0
To what extent do you believe that excessive drinking of sugary beverages like soda can cause high blood pressure?		
Not Applicable	42	10.8
Very large extent	21	5.4
Large extent	27	6.9
Rarely	132	33.8
Never	168	43.1
Total	390	100.0
To what extent do you believe that excessive drinking of sugary beverages like soda can cause cancers?		
Not Applicable	42	10.8
Very large extent	66	16.9
Large extent	78	20.0
Rarely	105	26.9
Never	99	25.4
Total	390	100.0

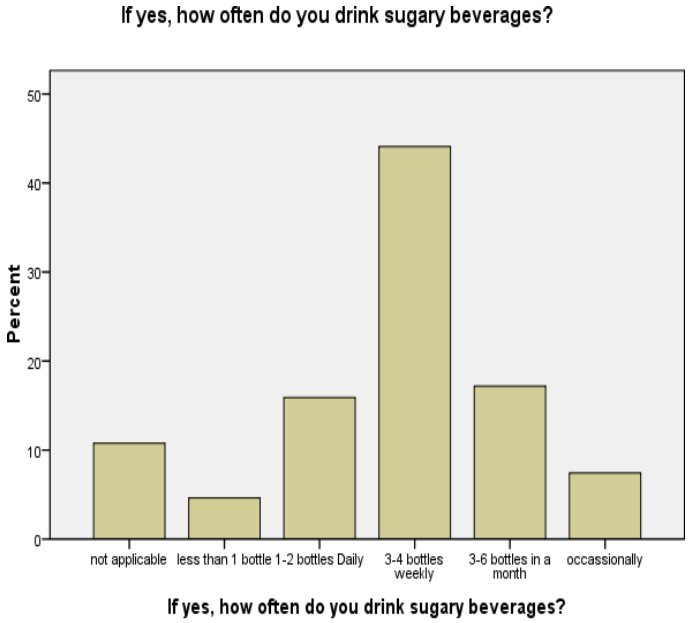
Source: *Researchers' Field Work June 2025*.

Table 2 shows negative beliefs about the health consequences of excessive consumption of sugary beverages like soda. Most respondents believe it could rarely led to weight gain and obesity, teeth problem, heart problem, high blood pressure and cancers. However, the majority believe it could be responsible for diabetes. Thus, the negative beliefs could result in excessive consumption of SSBs among students.

Level of SSBs consumption among the university student

The result illustrates that all 348 students (100%) who have seen social media campaigns against excessive sugar consumption have taken sugar-sweetened drinks, and the majority (44.1) take between 3-4 bottles in a week, followed by 15.9% who take soda 1-2 bottles daily, 17.2% take -6 bottles in a month, 7.45% take occasionally, and 4.6% take less than 1 bottle daily as represented in figure 1. These results show that most respondents in this study are regular consumers of soda drinks. As such, many students may show symptoms of sugar-related diseases in the nearest future.

Figure 1: SSBs consumption pattern among the respondents



Factors that influence consumption of soda drinks

Respondents were asked to rate the factors that can influence their soda consumption from 0-5, being the highest number and zero (0) the lowest. The results show that taste (30.0%), easily accessible when someone is hungry/tasty (54.1%) and peer pressure (22.3%) were scored the highest number (5) as factors that influence consumption of sugar sweetened drinks, whereas most students (18.2%) scored affordability intermediate number (3) and 23.6% scored taking of soda as status symbol 2nd to the lowest number (2). This suggests that the taste of soda drinks, its accessibility when someone is hungry/tasty and peer influence are the major factors motivating the consumption of soda drinks among the university students. Thus, students may go for alternatives due to changes in tastes, price and inaccessibility of SSBs in the university campuses.

Test of hypothesis

Table 3: Correlations Statistics showing the

Relationship between Exposure to Social Media Campaign on Reduction of Sugar Intake and Knowledge and Belief in Associated Health Risks, and SSBs Consumption Patterns

Correlations between exposure to social media campaigns against excessive sugar intakes and knowledge of health risks associated with consumption of SSBs		Exposure to Social Media Campaign on Reduction of Sugar Intake	Knowledge of Associated Health Risks
Exposure to Social Media Campaign on Reduction of Sugar Intake	Pearson Correlation	1	.508**
	Sig. (2-tailed)		.000
	N	390	390
Knowledge of Associated Health Risks	Pearson Correlation	.508**	1
	Sig. (2-tailed)	.000	
	N	390	390
Correlations between exposure to social media campaigns against excessive sugar intakes and Belief in SSBs Associated Health Risks		Exposure to Social Media Campaign on Reduction of Sugar Intake	Belief in SSBs Associated Health Risks
Exposure to Social Media Campaign on Reduction of Sugar Intake	Pearson Correlation	1	.406**
	Sig. (2-tailed)		.000
	N	390	390
Belief in associated health risks	Pearson Correlation	.406**	1
	Sig. (2-tailed)	.000	
	N	390	390
Correlations between Knowledge of Associated Health Risks and Consumption Patterns of SSBs		Knowledge of Associated Health Risks	Consumption Patterns of SSBs
Knowledge of Associated Health Risks	Pearson Correlation	1	.955**
	Sig. (2-tailed)		.000
	N	390	390
Consumption Patterns of Sugar Sweetened Beverages	Pearson Correlation	.955**	1
	Sig. (2-tailed)	.000	
	N	390	390

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows statistically significant relationship between exposure to social media campaign on reduction of sugar intake and knowledge and beliefs associated health risks at $p<0.05$**.** More so, the knowledge of associated health risks significantly correlates with the consumption patterns of sugar-sweetened beverages among the students at $p<0.05$. Therefore, all the null hypotheses were rejected. Hence, exposure to social media campaigns against excessive sugar intakes has significant correlation with students' knowledge, belief and consumption of sugar-sweetened beverages.

5. Discussion of Findings

The findings of the study show that exposure to social media campaigns on reduction of excessive sugar intakes through soda drinks consumption among the sampled respondents is high (92.1%), and Facebook posts are the most accessed, followed by WhatsApp, YouTube, Tiktok and posts. This finding confirms the claim that social media posts on reduction of sugar intakes abound on social media platforms (Te et al., 2019).

However, most respondents do not read the texts/play the videos to the end to grasp the complete message being passed in the posts. Consequently, knowledge of the health implications of excessive sugar intakes through soda drinks consumption is very poor among the sampled respondents as most students associated only diabetes to sugar intake. The finding supports previous report about good knowledge of diabetes as a sugar-related disease (Lundeen et al., 2018; Miller et al., 2022; Pramanik, 2024) and the report that students are not fully aware of the health consequences of excessive sugar intakes (Salim & Ali, 2020). The implication is that ignorance about the health implication could hinder responsible consumption of soda drinks and expose more youths to sugar-related diseases. Content creators could encourage viewers to read texts/watch videos to the end to obtain adequate knowledge and make informed decisions.

In addition, the results show that most of the sampled respondents have negative beliefs regarding the health consequences of excess sugar consumption through regular soda intakes. Consequently, most of the respondents take 3-4 bottles of soda in a week, followed by those who take 1-2 bottles daily. This finding corroborates previous claims that most students are regular consumers of soda drinks (Lundeen et al., 2018; Hunter et al., 224). Also, the data suggest that taste, accessibility and pressure influence soda consumption among the respondents more than affordability and status symbol. Therefore, it is imperative that social media campaigns incorporate sufficient information about the health risk associated with regular soda consumption to ensure informed decision-making.

However, the hypotheses results suggest significant

relationship between exposure to social media campaigns against excessive sugar intakes and knowledge and beliefs associated health risks at $p<0.05$. Likewise, knowledge of associated health risks significantly correlates with SSBs consumption pattern. The result suggest that social media serve as viable and impactful platforms for promoting low sugar awareness campaigns targeted at young people. However the result contradicts past reports about insignificant association between knowledge of health consequences and consumption of soda drinks (Wattelez et al., 2019; Chia-wen & Duan-rung, 2022; Hunter et al., 2024). The reasons for non-significant correlation may include addiction, low perceived personal risks, social and environmental influences aong other factors.

6. Conclusion and Recommendations

Most respondents have access to social media posts on reduction of sugar intakes but most respondents do not read the text/watch the videos to the end. There is poor knowledge about the health implications of excessive sugar intakes through the consumption of soda drinks. There is a negative belief about the health implications of excessive sugar intakes through the consumption of soda drinks. However, exposure to social media posts on reduction of sugar intakes significantly correlates with knowledge and belief of health risks, as well as consumption of soda drinks among the sampled students, indicating that social media can serve as viable platforms for the campaign for low sugar consumption. Based on the findings, the study recommended that social media content creators should encourage followers to read or watch posts on reduction of sugar intakes to the end to boost understanding and informed decision-making. Healthcare workers should leverage on social media to provide more information on the health implications of excessive sugar intakes. Influencers and patients could share personal experiences to promote positive beliefs about the health implications of excessive soda consumption, and university management should implement intervention polices such as partial restriction or outright ban on sugar-sweetened beverages exceeding the recommended average per bottle, and promote healthier alternatives to sugar-sweetened drinks in university campuses.

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