

#winemom and #momjuice posts on Instagram during the COVID-19 pandemic: A cross-sectional, descriptive study

Corey Basch, Zoe C. Meleo-Erwin, Jan Mohlman, Joseph Fera, Nasia Quinones

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#winemom and #momjuice posts on Instagram during the COVID-19 pandemic: A cross-sectional, descriptive study

Corey Basch¹ EdD, MPH; Zoe C. Meleo-Erwin¹ PhD; Jan Mohlman¹ PhD; Joseph Fera² PhD; Nasia Quinones¹ BA

¹William Paterson University Wayne US

²Lehman College Bronx US

Corresponding Author:

Corey Basch EdD, MPH

William Paterson University

300 Pompton Rd

Wayne

US

Abstract

Background: The tendency of parents to consume alcohol during the COVID-19 pandemic is likely to be moderated by pandemic related stress combined with the ongoing demands of childcare and home-based education, which are reported to be more burdensome for females than males.

Objective: The purpose of this study was to describe alcohol-related content posted by mothers on Instagram during the COVID-19 pandemic.

Methods: Using two popular hashtags, #momjuice and #winemom on Instagram, 50 posts on each were garnered from the “top posts” tab. The coding categories were created inductively and were as follows: displays alcohol (drinking/holding alcohol or alcohol itself); person is making alcoholic beverages; type of alcohol featured or discussed; mentions anxiety and/or depression/mental state; highlights struggling (in general); highlights parenting challenges; encourages alcohol consumption; discourages alcohol consumption; features a person wearing clothing or show products promoting alcohol; promotes alcohol rehabilitation; discusses caffeine to alcohol daily transition throughout the day; and mentions other drugs aside of caffeine and alcohol.

Results: Overall, the 100 videos had a total of 5,108 comments and 94,671 likes. The respective averages (standard deviations) were 51.08 (77.94) and 946.71 (1731.72). A majority of the videos (58%) featured a woman, while only 5% featured a male. The remaining videos featured a non-binary individual (10%), both a male and female (6%), or this was not applicable (21%). A majority (>50%) of videos reviewed encouraged alcohol consumption (66%) and/or displayed alcohol (56%). Of the 66 that encouraged and/or displayed alcohol, the overwhelming type of alcohol discussed or featured was wine (55%). Only 6% of the videos reviewed discouraged alcohol use and only 4% provided the audience with a disclaimer. None of the videos observed promoted/endorsed alcohol rehabilitation in any way. Only 37% of the videos reviewed highlighted struggle. However, these videos garnered more than a majority of the likes (52.3%). Videos that showed struggle received an average of 1,359.57 (SD=2,108.02) likes. Those that did not show struggle had an average of 704.24 (SD=1,447.46) likes. An independent one-tailed t-test demonstrated this difference to be statistically significant, as well, with $p=.04991$.

Conclusions: The findings of this investigation suggest that though these hashtags ostensibly exist to valorize excess alcohol consumption, they may be serving as a support system for mothers who are experiencing increased burdens and role stress during the pandemic. Given the strains placed on mothers overall and especially during the COVID-19 pandemic, efforts must be taken to increase access to and affordability of telehealth-based mental health care. Social media forums such as Instagram are a place to potentially highlight the availability of such services.

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Original Manuscript

#Winemom and #Momjuice posts on Instagram during the COVID-19 pandemic: A cross-sectional, descriptive study

Corey H. Basch,¹ Zoe Meleo- Erwin,¹ Jan Mohlman,² Joseph Fera,³ Nasia Quinones¹

¹ Department of Public Health, William Paterson University, Wayne, NJ 07470

² Department of Psychology, William Paterson University, Wayne, NJ 07470

³ Department of Mathematics, Lehman College, The City University of New York

Address Correspondence to: Corey H. Basch, Ed.D., M.P.H.; Professor and Chair, Department of Public Health; William Paterson University, University Hall, Wayne, NJ 07470 Phone: (973)-720-2603 Email: baschc@wpunj.edu

Author Contributions. CH Basch and JM conceptualized the study. NQ collected the data, JF conducted the data analysis. All authors contributed to the manuscript production.

SHORT PAPER

Introduction

Much media attention has been paid to both the burdens that the COVID-19 pandemic has placed upon women in general and mothers in specific. Though previous studies have noted that representations of drinking are commonplace on Instagram, these studies tend to be focused on youth. Given that recent research suggests an alarming increase in alcohol consumption among women during the pandemic, an investigation into how this population represents alcohol use on social media is warranted. This study sought to describe and analyze posts focused on drinking among mothers on Instagram on several content dimensions (e.g., promoting alcohol consumption, stress/struggle, social support) which may clarify the attitudes and motivating factors of an online subgroup of drinking mothers.

Neither the mental health nor the economic effects of the pandemic in the United States (U.S.) have been borne evenly. Regarding the economic fallout, alarm bells were rung regarding the potential for

a COVID-19 “she-cession” given that women constituted the majority of those who either lost employment in spring of 2020 or took a leave of absence from their positions in order to care for children learning from home [1]. A recent Census Bureau report [2] describes the labor market losses women have faced over the past year as “devastating.” The authors note that as of mid-January of this year, approximately 10 million women in the U.S. living with school-age children were not actively in the labor market, an increase of approximately 1.4 million from the January prior [2]. Though mothers were hit harder by the economic effects of the pandemic compared to fathers, the gap in the work status between the two groups has narrowed substantially over the past several months [2].

Nevertheless, areas of considerable concern remain. First, as the U.S. Bureau of Labor Statistics has documented, women continue to carry far more of the burden for domestic and childcare labor than do men [3-4]. When mothers return to the labor market they must once again balance domestic labor with paid labor [2]. This is complicated by the fact that across the country, many children continue to learn from home – whether because school districts are still operating in a remote format or because parents have chosen this mode of delivery out of an abundance of caution. This balancing act is made all the more complicated by pandemic-specific “care economy” work [5] undertaken by women wherein women are attending to the emotional well-being of family members. Second, previous studies have documented that a temporary departure from the labor force (e.g. for childbirth) may have long-term negative effects on women’s earning power [2]. Given this, pandemic-related labor-force participation gaps may suppress the economic position of women for years to come.

While disparities based on race/ethnicity are not a focus of this paper, it's important to note that amongst women, the labor market effects of the pandemic have been uneven with women of color facing worse economic outcomes. The economic effects of the pandemic – as with the health impacts [6] – vary by race/ethnicity, with Asian, Black, and Hispanic women facing substantively higher rates of continued unemployment compared to white women, at 9.5%, 9.3%, 8.8%, and 5.0% respectively as of January 2021[2]. Thus, the economic recovery for women of color, as well as for women of all backgrounds in harder hit industries, may take substantially longer than it will for more advantaged women [7].

In terms of mental health, Americans in general saw increases in anxiety and depression during the pandemic [8], however effects may have been worse for women than men [9]. Moreover, research suggests that increases in anxiety and worry appear to have been greater among women with children in the household than for men in such households [10-12]. Cameron et al. note that risk for maternal anxiety has been particularly vulnerable to financial strain [10].

Alcohol consumption is known to rise during crises such as pandemic illness. For instance, during the week of March 21, 2020, Nielsen reported that alcohol sales were up 55% [13]. Additional studies have found gender-based differences in alcohol use during the pandemic. Though the prevalence of drinking alcohol, including binge drinking, is generally higher among men than women [14-15], more women than men reported an increased consumption of alcohol since the pandemic began [16]. In fact, level of pandemic related distress has shown a positive association with the number of drinks consumed by females in both typical and heavier drinking episodes (16%, 13% respectively) [17]. Pollard et al. found a greater increase in heavy drinking in particular for women compared to men [18]. This increase may be explained by findings that women use alcohol to moderate stress and anxiety more so than do men [19].

In a 2020 survey addressing changes since the onset of the pandemic, 27% of parents reported the emergence of mental health problems and 24% a loss of childcare from March to June. Although this

pattern was found evenly across racial, ethnic, income, and education groups, women consistently reported worse perceptions of their own mental health than men [20]. Additionally, since the pandemic began, both men and women reported heavier drinking during the pandemic if children were sheltering in the home. This stands in stark contrast to evidence that pre-pandemic drinking patterns were actually less risky among parents with children at home than those adults without children [21]. This increase in alcohol consumption may be related to the intensive demands of home schooling and daily childcare responsibilities, in addition to the financial and psychological stress already exerted by COVID-19-related lockdowns [22-25]. Taken together, relevant studies suggest that the tendency of parents to drink alcohol during COVID-19 is likely to be moderated by pandemic related stress combined with the ongoing demands of childcare and home-based education, which are reportedly more burdensome for females than males.

Cameron et al. note in the context of the ongoing pandemic and social-distancing directives, internet-based mental health services provide a viable option for families experiencing distress that can afford to access such services [10]. Yet, the authors continue, the transition to remote, telehealth-based psychological interventions have been slow and moreover, “most telehealth models do not concurrently treat mental health concerns and parenting risks, despite the evidence for the importance of addressing both” [10]. It is in this context as well as the fact that women are more likely to go online for social support [26] that we have undertaken an examination of alcohol-related content posted by mothers on Instagram. Instagram boasts over one billion users per month, with the majority being female [27]. Previous studies have found that posts featuring alcohol consumption are commonplace on social media. However, these studies have tended to focus on posts created by young people, rather than adults in general or mothers in specific [28-30]. At the time of writing, we did not identify any papers in the peer reviewed literature that examined alcohol-related content posted by mothers on Instagram during the pandemic. Addressing this gap was the purpose of this study, with the aim to better understand the elements of posts to #winemom and #winejuice and to be able to characterize the overall tone and elements of use of #winemom using systematic methods.

Methods

The methods for this study were similar to others on other health topics [31-32] in that content was assessed for important themes. This study took place in February 2021. Using two popular hashtags, #momjuice and #winemom on Instagram, 50 posts on each were garnered from the “top posts” tab. At the time of study #momjuice had 37.8 thousand posts and #winemom had 77.6 thousand posts. Posts were excluded if they were in a language other than English (n=3), or if they were advertisements or giveaways (n= 9). The date, number of comments, number of likes, if there was a disclaimer (a statement limiting responsibility for the post), and if the post used an illustration was recorded. The unit of analysis considered images and corresponding captions. Using content analysis, an Excel spreadsheet was created to manually analyze the presence of given themes. Our methods were best defined as follows, “A research technique for the objective, systematic and quantitative description of the manifest content of communication[33].” The coding categories were created inductively and were as follows: displays alcohol (visible alcohol such as drinking/holding alcohol or alcohol itself); person is making alcoholic beverages (visible ingredients/mixing materials); type of alcohol featured or discussed (if they mentioned or displayed what they were drinking); highlights anxiety and/or depression/mental state (mentions or suggests anxiety, stress, depression whether in the context of parenting or in general); highlights struggling (mentions or suggests having difficulty overcoming obstacles); highlights parenting challenges (mentions or suggests difficulties specifically related to parenting) ; encourages alcohol consumption (condones alcohol as beneficial); discourages alcohol consumption (discourages alcohol as an

unfavorable)activity; features a person wearing clothing or shows products promoting alcohol (products ranged from clothing to cups with sayings or words endorsing alcohol consumption); promotes alcohol rehabilitation (mentions or suggests that alcohol rehabilitation is beneficial); highlights caffeine to alcohol daily transition throughout the day (mentions or suggests the need for caffeine early in the day and alcohol later) ; and highlights other drugs aside from caffeine and alcohol (mentions or suggests the use of any other drug). Inter-rater reliability was established with a random sample of 10% or 10 posts coded by NQ recoded independently by CB. One reviewer (NQ) viewed all 100 posts and observed them for a collection of predetermined content characteristics. A second reviewer (CB) coded a random sample of 10 posts to observe them for the same content. In total, the two reviewers differed in only 4 out of 340 data points. This resulted in near-perfect agreement: an inter-rater reliability score of $\kappa=.96$. The 4 discrepancies happened in the following 3 categories: picture of a child (2), highlights struggle (1), and wearing clothing or showing products promoting alcohol (1). These few discrepancies were resolved through reanalysis of the posts. Data analysis was completed using MS Excel; it included running descriptive statistics and conducting independent one-tailed t-tests ($\alpha=.05$) on observations of note to determine statistical significance. As this study did not involve human subjects, the policy at the Institutional Review Board at William Paterson University is that it would not require approval.

Results

Overall, the 100 posts had a total of 5,108 comments and 94,671 likes. The respective averages (standard deviations) were 51.08 (77.94) and 946.71 (1731.72).

Table 1 shows 12 different content characteristics and the total number of posts for which this content was observed. The table also includes the number of comments and likes received by posts featuring this content. Relative percentages are included for comparison.

A majority (>50%) of posts reviewed encouraged alcohol consumption (66%) and/or displayed alcohol (56%). Of the 66 that encouraged and/or displayed alcohol, the overwhelming type of alcohol discussed or featured was wine (55%). Only 6% of the posts reviewed discouraged alcohol use and only 4% provided the audience with a disclaimer. None of the posts observed promoted/endorsed alcohol rehabilitation in any way. Therefore, this characteristic was removed from the table.

Even though more than 50% of the posts reviewed displayed alcohol, these posts only garnered 26.95% of the total likes. An independent one-tailed t-test ($\alpha=.05$) showed this observation to be statistically significant with $p=.0017$. More specifically, the t-test showed that posts that displayed alcohol were less likely to receive a like when compared to those posts that did not display alcohol. Note that the average number of likes for posts displaying alcohol was 460.34 (SD=1,006.56) as compared to 1,565.73 (SD=2,231.14) for posts not displaying alcohol.

Only 37% of the posts reviewed highlighted struggle. However, these posts garnered more than a majority of the likes (52.3%). Posts that showed struggle received an average of 1,359.57 (SD=2,108.02) likes. Those that did not show struggle had an average of 704.24 (SD=1,447.46) likes. An independent one-tailed t-test ($\alpha=.05$) showed this difference to be statistically significant, as well, with $p=.04991$. Therefore, the data indicate that posts highlighting struggle were more likely to receive likes than those that do not show struggle. It should be noted that the WHO declared that COVID-19 had reached pandemic levels on March 11, 2020 [34]. A total of 23 posts occurred before the declaration of a pandemic (< 3/11/20) and 77 posts occurred after the pandemic declaration (3/11/20 and after). Of the 23 posted before pandemic, 19 (82.61%) did not have a theme of

struggling and 4 did (21.05%). Of the 77 posted during the pandemic, 40 posts (57.14%) did not highlight of struggling, whereas 33 (42.86%) did highlight struggling. Of the 37 posts that highlighted struggle, 13 also displayed alcohol. None of these 13 posts display a person making an alcoholic beverage. However, 11 of these 13 posts (84.61%) do encourage the consumption of alcohol.

Discussion

The findings of this study suggest that the sample of posts evaluated in this study (under the hashtags, #momjuice and #winemom) most commonly indicated encouragement of alcohol consumption, display of alcohol, and highlighted struggling to cope. The fact that the encouragement of alcohol did not garner the most likes, but rather content related to struggling did, suggests that #winemom and #momjuice may provide a forum for validation and support related to the burdens faced by mothers trying balance multiple forms of labor – paid and unpaid. Notably, while some of the posts in our sample were dated prior to the declaration that COVID-19 was a pandemic, those that occurred after were more likely to highlight struggling. This may be indicative of the additional “care economy” work [5] required by mothers over the past year.

While it is important to note that ‘wine mom’ terminology existed prior to the pandemic [35], the proliferation of ‘wine mom/ mom juice’ paraphernalia [36] leads to questions as to the reasons for the movement. It is currently unknown whether the derivation of the #wine mom/#momjuice movement is simply a humorous meme with limited implications, or if there is more to the message which should take in to account the undue pressure placed on all parents, but particularly women, especially during the COVID-19 pandemic [35-38]. In times of crisis, individuals who participate socially (e.g., identify with groups, derive social support from others, feel a sense of belonging to a community) may benefit from enhanced personal resources [39-40]. Online groups such as ‘wine mom’ may thus function as a humorous protective buffer for its members. Along with the social connection provided by the group, the humorous aspect, as well as the situational reframing may provide a relieving counterpoint to the strong negative emotions felt by many as the pandemic unfolded, lockdowns were mandated, and women in particular faced sudden and dramatic changes in roles and perceptions of mental health [41-42].

This study is limited by the small sample size, the cross-sectional design, and the ever-evolving state of posts on this platform on a daily basis. Further study should focus on commentary generated on these posts as well as how these may change on a longitudinal basis, as with all cross-sectional studies, external validity is low. Further, the methods for this study are limited by the lack of profile data on the source of each post. Nevertheless, to our knowledge, this is the first study to examine this content in general, and specifically during a time of heightened stress and anxiety. The findings of this investigation suggest that though these hashtags ostensibly exist to valorize excess alcohol consumption, they may be serving as a support system for mothers who are experiencing increased burdens and role stress during the pandemic. Given the strains placed on mothers overall and especially during the COVID-19 pandemic, efforts must be taken to increase access to and affordability of telehealth-based mental health care. Social media forums such as Instagram are a place to potentially highlight the availability of such services.

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Table 1. Observed characteristics/content and comments/likes of 100 alcohol-related content posted by mothers on Instagram

	<u>N</u>	<u>Comments</u>	<u>%</u>	<u>Likes</u>	<u>%</u>
	100	5,108	100%	95,671	100%
Encourages Alcohol Consumption	66	2,762	54.07 %	40,137	41.95 %
Displays Alcohol	56	2,436	47.69 %	25,779	26.95 %
Highlights Struggling	37	1,998	39.12 %	50,034	52.30 %
Highlights Parenting Challenges	26	1,394	27.29 %	38,546	40.29 %
Includes Clothing/Products Promoting Alcohol	19	1,199	23.47 %	5,641	5.90%
Highlights Anxiety/Depression/Mental State	15	956	18.72 %	20,689	21.63 %
Features a Picture of a Child	11	419	8.20%	5,428	5.67%
Discourages Alcohol Consumption	6	360	7.05%	3,796	3.97%
Gives a Disclaimer	4	700	13.70 %	971	1.01%
Highlights Caffeine to Alcohol Daily Transition	3	120	2.35%	1,856	1.94%
Features a person Making Alcoholic Beverages	2	97	1.90%	1,136	1.19%
Highlights Other Drugs Aside from Caffeine and Alcohol	2	395	7.73%	11,133	11.64%

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Supplementary Files

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