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Thomas, David; Alston, Margaret; Jambulingam, Malliga; and Hunt, Ariel, "Social Media Usage for Changes in Health Practices and Health Promotion" (2022). *School of Community Health & Policy*. 83.
https://research.paynecenter.org/morgan_schp/83

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Social Media Usage for Changes in Health Practices and Health Promotion

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Received January 20, 2022; Revised February 23, 2022; Accepted March 01, 2022

Abstract Background: Behavior change is essential in adopting healthy behaviors. Although several social media (SM) platforms such as Facebook, Myspace, Twitter, etc., are available to share information and to promote health behaviors, how are they used in and health promotion? What specific online platform is used in supporting the health promotion of adopting health behaviors in general? By this, it can be understood what SM platform can be used to change the behavior of some African American mothers' infant safe sleep practices to prevent the risk of Sleep Related Infant Death. **Objective:** To explore the literature for the identification of specific social media platform(s) that is/are helpful in changing the behavior of the general population. **Methods:** PubMed, EBSCOhost, and Google Scholar search engines were utilized to find articles that supported changes in health behavior following social media use, were published between 2010 to 2021, had free access, outlined interventions, and reported media marketing impacts, health promotion, as well as documented improvements in health behaviors. **Findings:** The findings of this literature review revealed that among all social media platforms such as Facebook, Twitter, YouTube, LinkedIn, and Myspace were utilized to obtain health information on various health topics including breastfeeding vaccinations, drug/alcohol use, physical activity, and more, Facebook was found to be the most utilized social media platform. Overall, women were the primary participants. However, no study has been done on changing the behavior of the African American mothers via social media platforms for adopting infant safe sleep practices. **Conclusion and Recommendations:** Although the literature has shown that Facebook was most utilized to improved behavioral health outcomes of various health topics, it did not describe how interventions led to improved behavioral health outcomes. Further research can be performed to identify how social media platforms influence health behaviors by measuring behavioral outcomes qualitatively and quantitatively. This result can be utilized to change the behavior of the African American mothers' for adopting infant safe sleep practices.

Keywords: African American, sleep-related infant deaths, social media, online, safe sleep

Cite This Article: David Thomas, Margaret Alston, Malliga Jambulingam, Ariel Hunt, and Yvonne Bronner, "Social Media Usage for Changes in Health Practices and Health Promotion." *American Journal of Public Health Research*, vol. 10, no. 2 (2022): 53-62. doi: 10.12691/ajphr-10-2-3.

1. Introduction

Sleep-Related Infant Deaths (SRID) are the leading cause of death of infants between 1 month and 12 months of life. In 2017, SUID deaths among infants (1-year-old) accounted for about 3,600 deaths annually in the United States, where 1,400 deaths were due to SIDS, 1,300 deaths were due to unknown cause, and 900 deaths due to accidental suffocation and strangulation in bed [1]. Literature shows that if the safe sleep practices recommended by the American Academy of Pediatrics (AAP) are followed, SRID can be reduced. Although a review of infant safe sleep interventions reported that while various interventions including education in various forms are valuable and effective in reducing SUID death rates [2], some African American (AA) mothers remain reluctant to adopt infant safe sleep recommendations. Adopting safe sleep recommendations by mothers and

caretakers is challenging, since doing so requires acquiring a new set of intentional behaviors.

In this COVID-19 Pandemic, educating mothers in-person on infant safe sleep practices is a big challenge. To help reduce the number of sleep related death among infants, there is the question of how AAP messages can be disseminated on a large scale to all mothers and caretakers. As COVID pandemic stress impacts human behavior, fostering practice changes with respect to SRID under the guidance of public health experts and through use of social media is timely and indicated.

Social media online platforms, such as Facebook and Twitter, are promising instruments that could improve population health [3]. In 2012, the World Health Organization (WHO) launched the global eHealth strategy to encourage the promotion, development, and evaluation of actions that involve these platforms [4,5]. Social media can bolster user participation, optimize health systems, be an interactive space for science dissemination, support health policies, and promote healthy behaviors [3].

Interestingly, more than 263 million people in developed countries use the internet, with more than one billion computers estimated worldwide by 2008 [5]. With the advancement of cell phones, smartphones are nearly as capable as a computer. According to Pew Internet and American Life Project (2006), 75% of Americans use the internet, and 57% have home access [6,7]. Because of the broad reach of the internet, researchers have been designing online interventions to promote changes in health behavior [7,8]. Online interventions have demonstrated positive health outcomes for behaviors such as physical activity and tobacco cessation [9,10,11,12,13,14]. As Social media use continues to grow daily and more platforms (i.e., Facebook, Twitter, Tik Tok) are developed, social media has become easier for its users to find health information and obtain beneficial education. Among all social media platforms, Auxier and Anderson from Pew Research Center (2021) quoted YouTube and Facebook, as these platforms continue to dominate the online landscape, with 81% and 69%, respectively. As a comparison, about half of Hispanic (52%) and Black Americans (49%) report using Instagram, compared to smaller percentages of White Americans (35%) who report the same. Hispanic Americans (46%) are far more likely to report using WhatsApp than African American (23%), with White Americans (16%) [15,16].

Although reports of positive behavior change have been noted after users visited one to several named social media platforms, unreported is which specific platform bears evidence of best influencing mothers who have infants for their adoption of safe sleep practices to reduce the risk of SRID. As there is no such scholarly reporting to date, this study aimed to search for evidence from the peer-reviewed pool of literature on specific social media platforms that will be effective among AA mothers of infants, such that they would learn and commit to safe sleep they would learn and commit to safe sleep practices for their infants.

In furthering this discussion, social media platforms can also reach large audiences. For example: one individual can share a message or provide a link to resources that

reach millions of people internationally. This mechanism of dissemination can be implemented to increase caretakers' understanding of infant safe sleep recommendations, allowing them to become more intentional and goal-directed in adopting safe sleep practices. Simeon et al. (2020) revealed that social media features influenced the positive behavior change. The American Academy of Pediatrics (AAP) acknowledged the powerful influence of media and advertisements on safe sleep which can shape people's beliefs, attitudes, and behaviors in the 2016 update to safe sleep recommendations and called for media and advertising to adhere to safe sleep guidelines [18].

2. Methods

A literature search was conducted using EBSCOhost, Google Scholar, ScienceDirect and ResearchGate search engines to find articles related to documented changes in SRID safe-sleep behavioral practices after users visited social media platforms. Search terms included combinations of social media, social media marketing, health communication, health campaign, health behavior change, parents, sleep-related infant death, SIDS, and intervention. These terms yielded a total of 23,300 articles from all search engines. Articles were included as they met the following criteria: published between 2010 to 2021, had free access, described its' online intervention, reported social media usage, included its' health promotion, and reported changes in health behaviors. Given this, 23,200 articles were excluded for not having met the inclusion criteria. Initial screening of titles and abstracts of articles were completed by the research team to determine eligibility. This resulted in 29 articles remaining. Seventeen articles were included in this review after removing the duplicates. Figure 1 provides a breakdown of the initial search strategy to the final selection of articles included in this review. Table 1 provides the demographic information for each article included in this review.

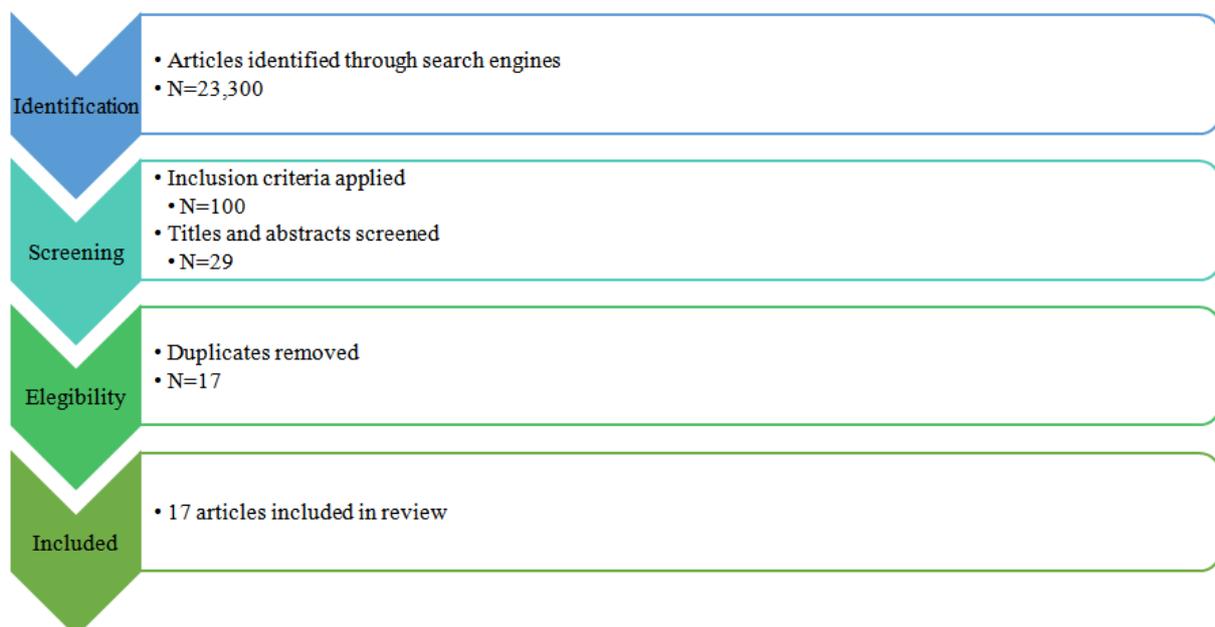


Figure 1. Summary of Literature Search and Review Process

Table 1. Infant Safe Sleep Interventions in African American Communities Demographics

References	Participants	Children	Social Determinants	Race/Ethnicity
[19]	Twitter users' tweets -5282 messages in September -13,438 in October -22,638 in November	Did not report	Did not report	Did not report
[20]	526 mothers in a Facebook group	Did not report	Did not report	Did not report
[21]	60 Undergraduates 18-24 years old	Did not report	Enrolled in College: 60 Male Total: 37 (62%) Male Control: 21 (70%) Male Exposure: 16 (53.3%) Female Total: 23 (38%) Female Control: 9 (30%) Female Exposure: 14 (46.7%)	All Hispanic
[22]	382 undergraduates	Did not report	Enrolled in College 367 (96%) at 1-week follow up Female: 74% Male: 26% 18-26 (M = 19.30, SD = 1.35)	White: 38% Asian: 28% Hispanic: 21% AA: 4% Other: 9%
[23]	258 parents Female: 83% Male: 17%	Children: 0-4: 5-11: 12-18:	Parent education High school or less: 107 College degree or more: 96 (37) Graduate Degree: 48 Missing: 7 <\$30,000: 45 \$30,000-\$74,999: 69 >\$75,000:117 Missing: 27 Single: 33 Married: 186 Divorced/Separated: 29 Missing: 10	White: 151 AA: 17 Hispanic: 37 Asian: 27 Other: 16 Missing: 10
[24]	85 pregnant women Median age 27	0 Children Intervention: 8 (19%) Control: 6 (15%): Total:14 (17%) 1-2 children Intervention: 26 (62%) Control: 125 (61%) Total: 51 (61%) 3 or more children Intervention: 8 (19%) Control :10 (24%) Total: 18 (22%)	Less than high school Intervention: 9 (21%) Control:2 (5%) Total: 11 (13%) High school graduate Intervention: 18 (41%) Control: 25 (60%) Total:43 (51%) Some college/associate degree Intervention: 14 (33%) Control: 14 (33%) Total: 28 (33%) Bachelor's degree or higher Intervention: 2 (5%) Control: 1 (2%) Total:3 (3%) >\$15,000: 78% (66/85) <\$15,000: 22% (18) Not reported: 1	AA Intervention: 36 (84%) Control: 39 (93%) Total: 88% (75/85) Hispanic Intervention: 2 (5%) Control: 0 White: Intervention: 3 (7%) Control: 2 (5%) Total: 5 (6%) Other Intervention:3 (7%) Control: 3 (7%) Total:6 (7%)
[25]	165 mothers	White # of children 1: 44 2: 26 3 or more: 5 AA # of children 1:14 2: 10 3 or more: 11 Hispanic # of children 1: 22 2: 17 3 or more: 16	High school or less: 27 White: ~age is 31.8 (SD=5.5) AA: ~age is 31.1 (SD=5.3) Hispanic: ~age is 31.1 (SD=5.3)	White: 75 AA: 35 Hispanic: 55
[26]	14 pregnant women 8 support persons	Gestation ranged between 10-40 weeks	Mothers Age ranged between 20-36 \$0-\$25,000 - 12; \$100,000+ - 2 High School - 8; College - 6 Support \$0-\$25,000 - 5; \$50,000+ - 2; Unknown - 1 High School - 3; College - 5	White: 1 AA: 21
[27]	24 mother-father dyads	6 - 36 months	Married - 19; Engaged - 3; Partnered - 2	Did not report
[28]	44 mothers ages 18-40 ~28.7	1-4 children ~1.77	Some college: 25 College degree or more: 19	White: 28 Hispanic: 11 AA: 3 Asian: 2

References	Participants	Children	Social Determinants	Race/Ethnicity
[29]	157 mothers 27 years old (SD = 5.15)	Average 7.90 months old (SD = 5.21)	HS: 3 Some college: 31 College degree or more: 123 <20K: 47, 20-50K: 46, >50k: 64	White: 141 AA: 4 Hispanic: 6 Other: 6
[30]	10 low-income mothers 29.9 age ±3.6 years	48 month or younger child 5 has 1 child 4 has 2 children 1 has 3 children	High school: 2, Some college: 2, College degree or more: 6 >\$15k: 2 \$15-\$30k: 4 Not reported 4	Asian: 1, Two or more races:1 White: 8 Hispanic or Latino: 2 Non-Hispanic or Latino: 7 Not reported: 1
[31]	806 parents/caregivers ~33.14 age ±10.08 years 16 - 74 age range	Did not report	65.5% urban 34.5% rural 76.1% Female 23.9% Male 77.9% were child’s parents 12.8% were child’s grandparents 7.8 % were other relatives 1.5% were partners of a parent	White: 209 AA: 254 Hispanic: 119 Two or more races: 29
[32]	49 pregnant women ~26.4 age ±6.6 years	Pregnancy groups: 11 Infancy groups: 9 Early childhood groups:10	High school: 34 College degree or more: 6	All Hispanic
[33]	34 state health departments	Did not report	Did not report	Did not report
[34]	23 fathers of preterm infants	Did not report	Did not report	Did not report
[35]	302 Parents 18-59 age range ~31.5 ±8 years 254 biological mothers 26 biological fathers 21 legal guardians	1-10 range of children ~2.5 age range ±1.6 years	Less than high school: 18 High school: 138 Some college: 110 College degree or more: 34 <\$50K: 211 >\$50k: 43 Did not report: 40	AA: 100%

3. Results

Table 2 describes what social media platform was used and its measured behavior change.

3.1. Study Characteristics

3.1.1. Study Location

Most of the included studies collected data within the United States. Five studies did not specify a location [19,20,23,33,34]. The states specifically mentioned where data was collected were California [22,26], Florida [21], Indiana [30], Massachusetts [33], Pennsylvania [35], Rhode Island [28], Washington [23], Washington, DC [35], and Texas [25]. Some studies specified regions in the United States [29] including the Midwest [27], and a southern state [31].

3.1.2. Demographics of the Sample

When identified, participants were primarily female. In general, mothers and female participants were studied most. When examining race, Swindle reported on the most racially diverse sample (2014). Other studies focused primarily on one race specifically. Participants ranged in age from 16-74. The most studied group was “low-income”. Education levels reported that most participants had at least a high school education.

3.1.3. Type of Research Studies

There were seven different types of research designs identified. All studies reviewed social media usage. Three studies utilized social media-based interventions [21,22,24], three used descriptive cross-sectional [23,26,32], one used exploratory [31], four used surveys [22,31,34,35], four used qualitative [26,27,28,33] designs, and four conducted post-content analyses [19,20,25,35] to investigate health behavior and social media.

3.2. Outcomes

Three studies had statistically significant data related to social media usage and behavior.

Evaluations by Fernandez et al. (2019) found that social media campaigns are helpful in improving awareness of HIV prevention services for college students. Nabi and colleagues (2019) found that when looking at emotion at $p < .05$ hope, $rp(369) = 0.13$, $p = .01$, and inspired, $rp(365) = 0.12$, $p = .02$. were statistically significant regarding a video about skin cancer prevention on social media. Participants who saw the video that featured sad personal stories ($M = 0.37$, $SD = 0.48$) $F(1, 364) = 4.85$, $p = .028$, $\eta^2 = 0.013$, were more likely to share the video. Fiks and colleagues (2017) found that a Facebook peer group had a positive impact on feeding behaviors for infants in families at high risk for obesity.

Table 2. Social Media and Health Behavior Outcome

References	Platforms	Health Topic	Participants	Methods	Findings
[19]	Twitter	SIDS	People who tweeted relevant information	Textural analytics were used to review relevant tweets	There is more of a presence and influence from news media organizations and universities than health departments.
[20]	Facebook	Maternal knowledge of SIDS, infant sleep practices, infant sleep/monitoring products and provider communication	Mothers from Facebook mother's group	Analyzed 20 posts and 912 comments from 512 mothers who participated in a Facebook mother's group	Mothers provided and received informational and emotional support regarding SIDS.
[21]	Facebook Instagram Twitter	Sexual Health	Hispanic young adults in south Florida	Evaluated social media-based platforms to increase access to HIV prevention information and services with an experimental design and a systematic review of the campaign's content and user interactivity.	Instagram had the highest reach, impressions, and interactivity The rise in awareness of HIV prevention services across both study conditions ($p < .001$) was statistically significant.
[22]	Facebook YouTube	Melanoma/Sun safety	Undergraduate students in California	Students completed a survey after watching one of eight versions of a video on Melanoma	Key predictors to message sharing were emotional intensity and self-efficacy. Participants who shared the video to Facebook immediately after seeing it ($M = 2.09$, $SD = 1.44$) reported significantly more sun safety behaviors during the next week than those who did not ($M = 1.37$, $SD = 1.25$), $F(1, 372) = 10.71$, $p = .001$, $\eta^2 = 0.028$. At $p < 0.05$, the emotions that were statistically significant for video sharing were hope, $r(369) = 0.13$, $p = .01$, and inspired, $r(365) = 0.12$, $p = .02$. Participants that viewed videos with very sad personal stories, $F(1, 364) = 4.85$, $p = .028$, $\eta^2 = 0.013$, ($M = 0.37$, $SD = 0.48$) were significantly more likely to share the video than those who did not ($M = 0.26$, $SD = 0.44$).
[23]	Facebook	Sleep Mental health Car safety	Parents of children ages 0-18	A cross-sectional survey on the patterns of internet and social media use, for what topics, and parental ratings of the accuracy, reliability, and appeal of information from social media	68% used social media to read or talk about child health and development. Parents of children under age 5 reported using social media more often to read child health content. The most common social media platforms used were Facebook (27%), Wikis (18%), and Blogs (18%).
[24]	Facebook	Obesity in low-income families	Pregnant women in Philadelphia, Pennsylvania	The Grow2Gether Randomized Trial randomly assigned participants into the intervention Facebook group or text message appointment reminders. Facebook groups had 9-13 participants and were facilitated by a psychologist using a curriculum of weekly videos addressing feeding, sleep, parenting, and maternal well-being. The intervention was assessed via survey using the frequency and content of participation, and acceptability.	The social media peer group was engaging and significantly impacted certain feeding behaviors for infants in families at high risk for obesity. Eighty percent (75/85) of the intervention participants reported that the group was helpful. After 9 months, those in the intervention group had significantly improved feeding behaviors.
[25]	Facebook YouTube	E-Health and New Mothers	Mothers living in the central Texas Metropolitan County	Cross-sectional surveys asked about the extent of participants' use of Facebook, YouTube and other electronic media in their roles as new mothers.	When looking at Facebook and YouTube usage, 77.6% of moms reported Facebook was used to socialize and 45.5% reported watching YouTube videos about baby care or being a mother. There were significant differences, with searching for baby-related information having the highest mean rank (4.26) and watching mother-baby related YouTube videos the lowest mean rank (2.20), $\chi^2(5) = 180.5$, $p < .001$.

References	Platforms	Health Topic	Participants	Methods	Findings
[26]	Social Media platforms were not specified	Infant feeding practices	AA women living in the San Francisco California Bay Area	Ethnographic research study using field observations, demographic questionnaires, and multiple in-person interviews. Key themes were identified via thematic analysis.	Infant feeding-decision making choices were influenced by social media.
[27]	Social media platforms were not specified	Infant feeding	Parents with at least one child in the Midwest United States	24 25-minute semi structured interviews were conducted	Social media influenced infant and toddler feeding perceptions. Parents also reported receiving and sharing health related information on social media.
[28]	Facebook Twitter YouTube	Women's Health issues	Mothers of newborns in Rhode Island	44 in-depth interviews	36/44 mothers had a Facebook account 3/44 mothers had a Twitter account Social media was used to finding health recommendations, seek support for baby's health conditions, and connecting with maternal and child health organizations. Mothers connected with significant others, family, old, new, and best friends for advice on health issues. Health recommendations included seeking new physician, new diet, answer health-related questions Mothers sought social and emotional support
[29]	Facebook Myspace	Maternal wellbeing	Mothers in the United States	On a 5-point scale, mothers ranked how often they used various forms of media in an online survey.	Mothers sought social and emotional support Mothers were on the internet almost 3 hours per day on average with social media usage being the primary use Younger mothers used social media more than older Mothers used social media for leisure, blogging, documenting personal experiences or sharing them with others (89%) and to stay in touch with friends and family (86%) Mothers utilized social networking sites significantly more than blogging on average (P<.001)
[30]	Facebook	Health information and post-partum information needs	Mothers in Indiana	Mothers were interviewed	Sought information regarding breastfeeding, general health and behavioral issues, and topics too difficult or uncomfortable to discuss with a healthcare provider Social media was used to get information on the maternal leaky boob and social support
[31]	Facebook Twitter	Child nutrition	Parents and caregivers from the Southern United States	A 20-item survey administered	57% of participants used FB daily for delivery of information compared to 12.5 % for Twitter The most popular daily technology uses were cell phones for calls (90.9%), texting (80.6%), the internet (69.9%), smartphones for internet (68.4%), and Facebook (57%). 47.1% used social media for information on parenting help while 4.8% used Twitter 53.2% used social media for information on healthy eating while 6.4% used Twitter Participants over age 45 used Facebook significantly less than younger adults. AA used Twitter significantly more than all other ethnic groups p<.03.
[32]	YouTube Facebook	Maternal health	Hispanic pregnant women in Massachusetts	Seven focus groups with Hispanic women at three life stages: two pregnancy groups, three infancy groups (children aged birth—6.9 months), and two early childhood groups (children aged 7–24 months)	Women looked for videos on the topics of pregnancy nutrition, baby development, breastfeeding, swaddling, and gas relief for babies. Many participants reported using Facebook for social networking. 47 participants stated they would not trust Facebook for pregnancy and child health information

References	Platforms	Health Topic	Participants	Methods	Findings
[33]	Facebook	Health Communication	State health departments (SHD)	Content Analysis contrasted Facebook 2,597 Facebook posts from 34 SHD over 200 days with CDC's BRFSS data on adult nutrition and physical activity, vaccination, smoking, adolescent health and road traffic accidents.	Topics posted by SHD were miscellaneous (32%), healthy living (12%), communicable diseases (9%), vaccines and immunization (7%), emergency preparedness and response (7%), infant and child health (5%), and smoking and tobacco use (5%).
[34]	Facebook	Paternal Health	Fathers of preterm infants on social media	Researchers examined 29 social networking Web sites including 10 Facebook sites, 6 forums, and 13 blogs for 23 fathers of preterm infants. The selected data included 131 posts that discussed fathers' experiences with their preterm infants transitioning from the NICU to home.	Five main themes: social supports, paternal concerns, emotional management, strong father figure, and locus of control. Fathers exchanged information (asking and answering questions), companionship, and emotional supports. Fathers exchanged concerns regarding health outcomes, healthcare costs and benefits, work schedules, lack of social supports for fathers, challenges of locating other fathers of preterm infants, parent empowerment, and emotional roller coasters on SM
[35]	Facebook LinkedIn MySpace Twitter	Child health	AA Parents in Washington, DC	Parents completed a survey	69.5% use the internet to get news or visit social networking sites (69.9%), whereas only 53.0% use the internet to get health information. 70% use for social networking (46% reported daily use) AA mothers with lower incomes were more likely to use MySpace Parents with more education and higher household income were significantly more likely to use LinkedIn (P<.01) 74% of parents would you join a social networking group about a health topic concerning their child 84% of the sample reported interest in receiving health information on the internet via email or online, and more than half are already using the internet to get health information.

The average number of Facebook posts according to the state health department (SHD) was 76.4 (median = 72.5), ranging from 34 (South Carolina) to 133 (Delaware) [33]. The average number of categories (of health messages) covered per SHD was 30 (median = 31), with a range from 12 (Massachusetts) to 42 (North Dakota) [33]. The SHD covered topics such as adolescent health, cancer prevention, chronic diseases, communicable diseases, drugs (including prescription) and alcohol emergency preparedness and response, environmental health, geriatric health, health insurance, healthy living, infant and child health, injury, and violence, mental health, miscellaneous, pet health advisory, reproductive health, smoking and tobacco use, vaccines and immunization, and women's health [33].

3.2.1. Platforms

The platform most reported was Facebook with 14 studies [20,25,28,35]. Twitter followed Facebook with 3 studies [28,31,35], and YouTube - 2 studies [28,32]. LinkedIn and Myspace were mentioned in one study [35].

3.2.2. Behaviors

Social media research included a variety of health behaviors. They included adult nutrition, pregnancy nutrition, baby development, breastfeeding, swaddling,

gas relief for babies, physical activity, vaccination, smoking, road traffic accidents, drugs, and alcohol use, and care for a baby (i.e. change diaper, holding, and soothing a fussy baby) [28,33].

3.2.3. Reasons for Using Social Media

Studies that involved social media and health behavior investigated topics concerning parents' concerns and needs regarding their child's health [34,35], parental support systems [34,35], identification of demographic differences in technology use and interest in receiving health information [28,32], as well as use of social media [31].

Many parents sought social media to get information. About 81% of parents in Mitchell (2014) used social media, primarily Facebook, to get information concerning their child's health. Facebook's parenting groups and pages were also utilized for information [31]. Participants used social media to get information on health issues, recommendations on health-related issues, and care for a baby [28]. Regarding the perspective of fathers, Kim (2016) identified reasons why fathers used social media. Fathers used social media to seek information, express paternal concerns, help with emotional management, identify what makes a strong father figure, and gather a locus of control.

In addition to an educational resource, social media was used to obtain social and emotional support. Participants reported using Facebook to follow maternal and child health organizations and to connect with family and friends for social and emotional support [28].

Despite that social media can provide reliable health-related education, there are parents that do not trust Facebook for pregnancy and child health information [32]. These parents only trust the information from their healthcare provider (e.g., doctor, nurse, WIC nutritionist) [32]. Additionally, female participants mentioned the need to use other resources such as family members and the internet as another source of credible information versus social media.

4. Discussion

Sleep-related infant deaths are the leading cause of death in infants less than twelve months of age. Literature shows that if the safe sleep practices recommended by the American Academy of Pediatrics (AAP) are followed, SRID can be reduced. Although a review on infant safe sleep interventions reported that while various interventions, including education, of various formats are valuable and effective in reducing SUID death rates [2], some African American mothers remain reluctant to adopt infant safe sleep recommendations. Adopting safe sleep recommendations by mothers and caretakers can be a challenge, since doing so requires being intentional about following prescribed behaviors.

Use of social media could have a favorable impact on increasing adopting prescribed infant safety behaviors, since its use continues to grow daily. Online interventions reported positive health outcomes for behaviors such as physical activity and tobacco cessation [9-14].

However, SRID-related findings from our review of literature revealed that social media has not brought about behavioral changes relative to safe-sleep practices in infants. The only successful platforms that have been investigated to assess the relationship between social media use and SRID is Facebook. However, SRID behavior-related benefits were not clear or convincing.

Current research reports, however, that online health interventions can lead to improved behavioral health outcomes [9,13] and social media platforms have been found to be a cost-effective way to disseminate health-related information [21].

Accordingly, Facebook was found to be the most utilized social media platform, being referenced in 14 of the 17 of the articles reviewed. The majority of the individuals connecting with social media platforms to access health information were female, which supports the ongoing conversation about males (men) who are reportedly not as personally engaged in their healthcare and general well-being.

Results also show that the behaviors most closely associated with social media research include adult - and pregnancy nutrition, general infant care/child development, breastfeeding, vaccinations, physical activity, smoking, drug/alcohol use, and road/traffic accidents.

Parents were found to be major stakeholders in accessing social media platforms, specifically Facebook, to research topics relating to health information

[28,30,31,32,33,35] and information pertaining to parental concerns and needs with respect to child health. Parents were also found to join Facebook parenting support groups, seek social and emotional support [28,29,31,33,35], and use the platform to stay connected with family and friends. In contrast to these findings, there were 47 pregnant Hispanic women in [32] that did not trust Facebook for pregnancy or child health information.

It is suggested that the results of this study be regarded within the context of review-based limitations. This study maximized the literature review search to four databases. Based on the inclusion criteria, articles utilized were obtained by free access, leaving only 17 articles to be reviewed. Additionally, articles included were published between 2010 to 2021, limiting the authors' ability to provide the reader with a mental image of how social media's impact on health behavior change has transitioned from the year 2000 to this present day. Different social media platforms existed in the earlier 2000s and exploring their impact on health behavior changes, if any, are worth further research and reviews.

5. Conclusion and Recommendations

Social media has become an integral part of the public health community. The use of social media instruments to disseminate health messages and health research has significantly grown over the past decade, specifically with Facebook, Twitter, and YouTube [36]. Increasingly, social media platforms have become effective tools to promote engagement, disseminate key health messages to various populations and increase access to reliable sources of health research and respected health authorities.

Social media platforms have given rise to commercial applications that offer new and sometimes radical approaches and strategies for using social media for improved health [37].

The findings of this literature review revealed that people utilized social media platforms such as Facebook, Twitter, YouTube, LinkedIn, and Myspace to obtain health information and advice, seek emotional support, engage in discussion around different health topics, and daily living practices.

Although several social media (SM) platforms such as Facebook, Myspace, Twitter, etc., are available to share information related to health promotional ideas, Facebook is used mostly in general, but how effectively it is used, is still a question? Also, this literature review did not illustrate or describe how online health interventions implemented lead to improved SRID behavioral health outcomes or changes. Future study can be performed to determine the effectiveness of Facebook usage and adoption of infant safe sleep practices among AA mothers in prevention of Sleep Related Infant Death.

Acknowledgments

Funding: Maryland Department of Health by BPO/PO: M00B9400330.

Many thanks to Ms. Colleen Wilburn, MPA; Director of MCH Division of MDOH for past and present support

of Morgan State's SRID Research Team. Many thanks to Aundrea Collins¹, MPH and Uzma Binte Haidary¹ for their review and edits of the manuscript.

Statement of Competing Interests

The authors have no competing interests.

List of Abbreviations

AA - African American
 AAP - American Academy of Pediatrics
 SIDS - Sudden Infant Death Syndrome
 SRID - Sleep-Related Infant Deaths
 SUID - Sudden Unexpected Infant Death
 SM - Social Media
 WIC - Women, Infants, And Children

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