



# Engaging the community served: a U.S. Cancer Center's Facebook live cancer awareness campaign for Spanish-speaking Latinos during COVID-19

Javier Mora<sup>1</sup> · Raul Romo<sup>2</sup> · Sandra Dempsey<sup>3</sup> · Betzaida Silva<sup>4</sup> · Debra Nevels<sup>2</sup> · Gustavo W. Leone<sup>2</sup> · Melinda Stolley<sup>2</sup>

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## Abstract

Cancer is the leading cause of mortality in U.S. Latino adults, a group with limited access to screening, higher rates of advanced disease, and prone to online misinformation. Our project created a Facebook Live social media video campaign on general cancer prevention, screening, risk, information, and resources, targeting Spanish-monolingual Latinos during the COVID-19 pandemic. Content was delivered in Spanish by fluent, ethnically concordant topic experts and cancer center staff. Four prerecorded and three livestream interview videos were produced, amassing over 161 shares, 1,000 engagements, 12,000 views, 19,000 people reached, and 34,000 impressions in a span of four months. Strengths of this project included developing community partnerships and collaborations, providing evidence-based cancer information in a culturally responsive manner to often-excluded community members during COVID-19 pandemic, and presenting our cancer center as an accessible resource to the wider community. Future directions include formalizing evaluation strategies to capture medical engagement via cancer screening and detection rates, delivering focused cancer discussions by disease sites, and further expanding audience base through mixed media formats.

**Keywords** Community engagement · Cancer · Latino · Hispanic · Spanish · Spanish-speaking · Social media · COVID-19 · Cancer education · Cancer screening · Cancer prevention

## Introduction

Cancer is the leading cause of mortality in U.S. Hispanic/Latino/a adults (henceforth Latinos) [1]. Latinos are more likely to receive a diagnosis of advanced stage cancer as compared to non-Hispanic whites (NWHs) [1], even when controlling for insurance access [2]. For breast, colorectal, and prostate cancers, limited access to screening and early detection is associated with increased advanced staging in Latinos [1]. A contributory factor impacting access to cancer care is language difference; according to the U.S. Census,

about one in ten residents speak a language other than English at home, of whom 40% report speaking less than very well. In head and neck cancer, limited English proficiency (LEP) is associated with more advanced tumor presentation and less likely to receive multimodality treatment [3]. In breast cancer, patients with LEP were less likely have access to portal messaging systems or clinical trial engagement [4], in addition to lower rates of online self-scheduling for screening mammograms [5].

Co-occurring epidemiologically with cancer diagnoses, the COVID-19 pandemic strained global and domestic healthcare systems and likely exacerbated preexisting care gaps. Data reveal reductions in cancer screening and diagnoses during the COVID-19 pandemic [5]. In addition, governmental precautionary measures promoted social distancing and limited movement of peoples. In the immediate term, these measures likely produced fewer opportunities to discuss cancer risk reduction and screening [6]. Also seen during the COVID-19 pandemic was the alarmingly rapid spread of online misinformation about

✉ Javier Mora  
jmora@bwh.harvard.edu

<sup>1</sup> Harvard Radiation Oncology Program, Boston, MA, USA

<sup>2</sup> Medical College of Wisconsin Cancer Center, Milwaukee, WI, USA

<sup>3</sup> Milwaukee, USA

<sup>4</sup> Milwaukee Area Technical College, Milwaukee, WI, USA

the virus's origins, transmission, and treatment. Oncology is no stranger to online misinformation, well-acquainted with its pervasiveness on websites like Facebook, Twitter, Pinterest, and Reddit [7]. Latinos may be prone to the abundance of user-generated and shared content that contains potentially deleterious health misinformation [8].

Internet access among U.S. Latinos, including immigrant groups, is prevalent and seen as a trusted way to obtain health information irrespective of source [9]. More than 80% of Latinos use social media, and 72% use Facebook [10]. Use is not limited to Latino youth, as 47% of Latinos ages 50 or greater report using Facebook in a 30 day period [11]. By the same token, there may exist a digital divide in how individuals may access the Internet, as the unequal distribution of digital technologies and their use among different groups can lead to disparities in access to information and opportunities. This issue is particularly relevant to Latinos, who have lower rates of internet and technology access compared to other racial and ethnic groups. Only 57% of Latino adults have access to a desktop or laptop computer, compared to 82% of white adults [12]. Additionally, only 64% of Latinos have access to high-speed internet at home, compared to 74% of whites [12]. Even when Latinos have access to technology, they may lack the digital and health literacy necessary to navigate health websites and applications effectively. It has been demonstrated that Latinos are less likely to use the internet for health information compared to whites, in part due to language barriers and low levels of health literacy [13–15].

However, leveraging social media platforms to disseminate health and cancer education has been done in other settings. In South Korea, a community-based cancer center developed eight video clips by medical professionals on cancer prevention, treatment, and survivorship. These videos were distributed on YouTube and accompanied by links to their cancer center mobile phone app and medical content blog. Over 15,000 YouTube video views and 300 blog posts were reported by the investigators [16]. In the U.S., the National Cancer Institute (NCI) quantified its Facebook social media audience engagement, noting posts with pictures garnered significantly more likes, comments, and shares than posts with videos, links, or status updates. NCI's Facebook page with over 150,000 users amassed 4,537 comments, 77,298 shares, and 145,462 likes over 4.5 years [17]. Finally, in a study targeting colorectal cancer (CRC) screening among Spanish-speaking patients, Aragonés et al. displayed an 11-min video which patients watched while waiting for their primary care visit. Although not social media-based, the video led to a 38% higher uptake of CRC screening in the intervention group as compared to the control group, reflecting the potential impact of video-based interventions [19].

These projects demonstrate delivery of cancer information to Internet users; however, they may be limited by a passive, unidirectional delivery of medical information and understanding without an active, real-time mechanism for participation and dialogue between the user and educator. Relatedly, culturally responsive cancer education models for Spanish-monolingual Latinos living in the U.S. are insufficient. In a patient's experience, language discordance with the healthcare system is associated with limited counseling by providers [18].

Particularly in Milwaukee, this city has a population of 592,649 based on U.S. Census American Community Survey (ACS) 2020 data [19]. Residents identifying as Latino total 115,160, or 19.4% of the city's population [19]. Within Milwaukee, 13.5% of adults above 18 years of age speak primarily Spanish at home [19]. To our knowledge, there has not been a local, targeted cancer video campaign to this medically underserved community in the Spanish language.

Consequently, our project harnessed the platform of Facebook Live social media to actively engage with Spanish-monolingual Latino community members. Topics covered included general cancer information, risk factors, prevention, screening, and awareness of our cancer center and community resources. Our imperative was to reach primarily Spanish-monolingual Latino community members about cancer during the COVID-19 pandemic, requiring innovative strategies afforded by social media. Herein, we describe these efforts and resulting engagement.

## Methods

Our project consisted of a hybrid video campaign model released to Facebook social media platforms. This campaign was done in collaboration with *Estamos Unidos US*, a bilingual Spanish–English multiplatform media company with over 6,000 Facebook page followers. The videos were delivered in Spanish with auto-generated, language-concordant subtitles to increase accessibility for the hearing-impaired. Our primary audience was U.S. Spanish-monolingual Latinos living in Milwaukee and Southeastern Wisconsin, the primary health service area of the Medical College of Wisconsin (MCW) Cancer Center. The content of these videos consisted of an introduction to the MCW Cancer Center as a resource for the community, information regarding general cancer risk factors, screening, and early detection in Latinos, and information on the importance of leading a healthy lifestyle to reduce cancer risk.

The videos were either pre-recorded or livestream interviews released between October and December 2021 on a near-weekly basis. Due to the ongoing COVID-19 pandemic and the subsequent reduction in access to non-crisis medical care, topics were selected by culturally concordant staff to

highlight cancer prevention and risk reduction. The interviews featured Spanish-speaking and ethnically concordant cancer center director (G.W.L.), physician (J.M.), and registered dietitian (B.S.) as guest experts. The interviews began with the expert's responses to four topic-specific structured questions prepared in advance with cancer center staff (R.R.) and moderated by a third-party host (S.D.). The remaining interview time was allocated to community members to participate and ask questions in real time through Facebook Live comments. Guest experts answered audience questions related to the featured topic, while cancer center staff were present to answer specific questions about the cancer center resources within the live interview or in-chat. At the conclusion of the interview, the recording was promptly uploaded within minutes to the *Estamos Unidos US* Facebook page for future replay.

Performance metrics as reported by Facebook media analytics were subsequently collected for each video last documented on 27 January 2022. "Total views" are the number of times people watched a video. "People reached" are the number of unique viewers who saw a video posted on the host's Facebook page. "Impressions" are the number of times a video was displayed on a viewer's screen. "Engagements" are the number of times people interacted with a video through likes, comments, or shares. "Shares" are the number of users who posted a video onto their personal Facebook page.

## Results

A total of seven videos were released onto Facebook social media platform amounting to 2 h, 55 min, and 32 s of playtime. Table 1 provides details on content, date released, duration, and Facebook performance metrics for each video. Specific content areas covered by these videos included general information about the cancer center, extended interviews regarding cancer trends in U.S. Latinos and dietary choices, and short-form videos regarding the importance of a healthy diet and local food banks to mitigate food insecurity.

These topics were selected by cancer center staff in the early stages of the COVID-19 pandemic under strict protocols of social distancing. We first introduced the cancer center to the community to establish trust and credibility and to ensure they understood its vision, purpose, and services. We recognized that this needed to be the first step in developing a relationship with the community because many people needed to become more familiar with the organization. Secondly, cancer is an illness that many people in the U.S. Latino community may not like to talk about. The associated stigma can make it difficult for community members to seek information and resources. Thus, we needed then to educate on the basics of cancer and subsequently show ways to make

more informed lifestyle choices. We particularly wanted to draw attention to the importance of nutrition in cancer risk-reduction prevention while understanding that many families, unfortunately, suffer from food insecurity and lack the resources to purchase nutritious foods. We highlighted the work of local food banks and pantries during the COVID-19 pandemic and their crucial role in providing free and nutritious foods to those who needed it most, including those with a cancer diagnosis.

Table 2 compares the livestream and prerecorded videos by Facebook performance metrics. On average, the livestream interview videos were of longer duration than the pre-recorded videos (45:53 min vs. 9:28 min). As a group, the four pre-recorded videos accumulated more views (14,007) than the three livestream interviews (2,707). The highest performing livestream interview by views, people reached, impressions, shares, and engagements was the video, "Cancer in the Latino community." The prerecorded video with the highest number of views, people reached, and impressions was, "The importance of a healthy diet in the prevention of cancer."

## Discussion

This hybrid social media campaign promoting cancer awareness and screening through the interactive Facebook Live platform delivered seven videos with over 161 shares, 1,000 engagements, 12,000 views, 19,000 people reached, and 34,000 impressions in a span of four months. To our knowledge, this project is the first of its kind to cover a wide array of cancer education topics targeting U.S. Spanish-monolingual Latino community members. These videos demonstrate their impact in providing reliable cancer education to a largely marginalized community in healthcare. In the age of social media misinformation, it is important to establish a veritable online presence to effect cancer health and understanding.

Our project produced video content introducing an academic cancer center as a resource to the community and answering questions on general cancer education, screening, and lifestyle adaptations in both live interview and pre-recorded formats. At the onset of the COVID-19 pandemic, community outreach required innovative ideas and approaches to deliver timely and accurate information. We first introduced the cancer center and its mission to establish trust, credibility, and offer of services. We recognized that this was the first step in developing a relationship because many community members may need to familiarize themselves with the organization. Secondly, through the culturally informed aforementioned staff involved in this project, we acknowledged that cancer is an illness often not talked openly in the Latino community, as there

**Table 1** Facebook video performance metrics of cancer center social media campaign

Video Title in English	Video Title in Spanish	Format	Release Date	Duration (mm:ss)	Total views	People reached	Impressions	Engagements	Shares
Updates from Medical College of Wisconsin Cancer Center: Advancements Close to Home	Actualizaciones del Centro de Cancer del Medical College of Wisconsin: Avances Cerca de Casa	Livestream interview	18 October 2021	46:32	552	1,200	1,700	107	15
Learn more about the work of Medical College of Wisconsin	Conoce mas la labor del Medical College of Wisconsin	Pre-recorded	20 October 2021	1:22	1,700	3,400	5,800	288	29
Cancer in the Latino community	Cancer en la comunidad latina	Livestream interview	25 October 2021	42:57	1,800	3,300	6,500	265	27
Cancer and nutrition	Cancer y nutricion	Livestream interview	1 November 2021	48:10	355	747	904	70	11
Importance of inclusion in cancer research	Importancia de la Inclusion en la Investigación del Cancer	Pre-recorded	15 November 2021	31:25	707				14
The importance of a healthy diet in the prevention of cancer	La importancia de una dieta sana en la prevención de cancer	Pre-recorded	2 December 2021	1:55	4,400	,7100	10,000	159	20
Local food banks can mitigate food insecurity	Los bancos locales de alimentos pueden mitigar la inseguridad alimentaria	Pre-recorded	9 December 2021	3:11	2,800	4,100	9,700	189	45

**Table 2** Facebook video performance metrics by format type

Type of video	Number of videos	Views	People reached	Impressions	Engagements	Shares
Livestream interview	3	2,707	5,247	9,104	442	53
Pre-recorded	4	14,007	21,700	35,500	795	128

is often stigmatization with diagnosis that may prevent individuals from seeking accurate information. Thus, we started with the basics of cancer genesis and risk reduction to lead healthier lifestyle choices. Specifically, we chose to draw attention to nutrition as a cornerstone of lifestyle change because of the many food challenges our community members may face. This could be when purchasing

foods to improve their cancer and overall health risks, in addition to the tangible realities of food insecurity. Developing videos highlighting the work of local food banks and pantries became a natural and secondary community partnership to assure the importance of nutrition especially as it pertains to cancer risk reduction and diagnosis.

While the livestream interviews offered a dynamic way to engage community members, as a group, the pre-recorded videos had more views, people reached, impressions, engagement, and shares. Some of these findings may be explained by the shorter length of the pre-recorded videos as compared to the livestream interviews. Due to the innate nature of an interview, these require a captive, interested, and synchronous audience for an extended duration of time, which shorter pre-recorded videos may see faster rate of video metric performance due to their asynchronism. A shorter video may also be more palatable to share, increasing its replay value. Another reason for greater Facebook metric performance of the pre-recorded video is some, such as “Learn more about the work of Medical College of Wisconsin,” was played before initiating the livestream interview. However, we believe there is value in employing a mixed format approach in delivering cancer education and information to community members. The livestream interviews made topic experts available to the community; a qualitative exploration of written comments by viewers at the time of the live interview consisted of inquiries on cancer symptoms preceding diagnosis or while receiving treatment, how to undergo cancer screening, examples of a healthy diet, and notes of gratitude to the host and speakers for the discussions. Thus, as our project released videos over time, later videos possibly benefitted from the campaign’s momentum, as the last two released videos had the first and second most total views, people reached, and impressions.

Our project possessed numerous strengths. The Latina-owned *Estamos Unidos US* brand and video production platform is well-established professionally and in tune with social trends in the local Latino community, an example of partnership between academic medical cancer centers and community organizations. The cancer center director, physician, and registered dietitian are all fluent bilingual speakers and of the same ethnicity as our target audience, which can be important factors in establishing trust with culturally concordant community members and patients as described previously. Through these efforts, our intention was to acknowledge the local Latino, Spanish-speaking community’s voice and enhance opportunities to address knowledge and resource gaps. The significance of creating content largely directed and supervised by those who represent the community cannot be emphasized enough. This population is often underserved or excluded by the healthcare system, and therefore this necessitates institutional work through a restorative justice lens to meet members whether they are, off- or online. Restorative justice is a bidirectional process that allows community engagement, communication, and a new approach to reparations from historical or current harm. Together, we hope to rebuild trust and sense of community during unprecedented times in the pandemic.

Limitations and future directions should be noted. Data are limited by Facebook analytics reliability. Relatedly, these anonymous data are devoid of demographic characteristics of clinical interest and would require research participant consent for a structured study design. Expansion of advertisement and cross-posting to additional social media platforms like YouTube, Instagram, or WhatsApp could broaden our audience as these media are also extensively used by Latinos [8]. Dedicated staff for consistent social media promotion may also improve awareness to capture and retain audience members, as advertisement often relied on the video host *Estamos Unidos US* Facebook page or topic experts creating personal Facebook posts to share in their own social media networks. Alternatively, additional resources can be used to promote videos with Facebook Business pay feature. Thus, by doing these, the number of shares could increase, as the most shared video had no more than 45 shares. Additionally, a more focused approach to discuss specific cancers with either higher prevalence, incidence, or mortality in the U.S. Latino community could prove beneficial in the future. Our team will consider an even more community-inclusive approach by hosting discussions of community members diagnosed and treated for breast and colorectal cancers for a more patient-centered approach. Finally, measuring impact in terms of engagement with the healthcare system or participation in screening encounters could be studied to further delineate the impact of cancer education via social media outreach campaigns.

## Conclusion

Our project used Facebook Live social media platform to bidirectionally engage Spanish-monolingual Latino community members with culturally and linguistically concordant cancer experts to discuss general cancer information, risk factors, prevention, and screening during the COVID-19 pandemic. This multidisciplinary work required innovative strategies afforded by social media. Our videos measurably demonstrate their impact in providing reliable cancer education to a largely marginalized community in healthcare. Efforts to sustain this work are ongoing to incorporate patient experiences and cancer subtypes.

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## Declarations

**Competing interests** I declare that the authors have no competing interests as defined by Springer, or other interests that might be perceived to influence the results and/or discussion reported in this paper.

**Ethical approval** No ethical approval is required.

**Consent to participate** This was an observational study.

**Consent for publication** I have read and understood the publishing policy, and submit this manuscript in accordance with this policy.

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