

# The Use of Social Media to Provide Health Education to the Underserved Community

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At University of Arizona College of Medicine-Tucson (UACOM-T), we have several student-run free clinics that offer a wide range of services, including primary care, psychiatry, and free vaccinations for children. The multitude of student-run free clinics was created due to the large prevalence of health disparities in the Tucson community. According to the U.S. Census Bureau, 43.2% of the Tucson population is Hispanic, and 3.5% is American Indian/Alaska Native.<sup>1</sup> Historically, the Hispanic population has the highest rate of uninsured individuals, closely followed by American Indians/Alaska Natives, when compared to other major ethnic groups, and are the least likely to receive insurance through their employer.<sup>2</sup>

Pima County, where Tucson is situated, has an uninsured rate of 11% compared to the national average of 10.5%.<sup>3</sup> Indian Americans/Alaska Natives and Hispanics are well above the Pima County uninsured average at 23.1% and 20%, respectively.<sup>3</sup> According to the Arizona Health Department, 35.7% of American Indians and Alaska Natives in Arizona, compared to 17% of all Arizonans, live below the federal poverty line.<sup>3</sup> Furthermore, 34% of the Hispanic community in Arizona has less than a high school degree education compared to 13.5% of the general Arizona population.<sup>3</sup> Lower education levels are associated with lower income and lower overall health status.<sup>3</sup> Local social disparities are also evident by the estimated 23.4% of Tucson residents living in poverty, well above the national average of 10.5%.<sup>4</sup>

At the beginning of 2019, some students at the UACOM-T decided to expand our network of

student-run free clinics to include an integrative medicine clinic that provides services typically reserved for the insured. Our clinic was set to open in April 2020; however, due to COVID-19, our opening was pushed back to a virtual start in June 2020. One of our goals as an integrative medicine clinic is to provide educational sessions to the underserved population of Tucson in order to promote healthy living and to combat the comorbidities that are more likely to impact this community. Due to the pandemic, we pivoted from planning in-person educational sessions to online sessions through Zoom but found that no one attended our online sessions.

We therefore adapted our educational content into Instagram posts. Although some people in our target population do not have access to the internet and/or technological devices, we felt confident that using social media to provide health education would reach a large portion of the population because many other student-run free clinics at UACOM-T have been successful in using Facebook, emails, and websites to publicize and coordinate their services. Moving forward, we will be utilizing Instagram to provide high-quality and easily accessible education to our diverse population, in hopes of decreasing the health disparities and empowering our community to live healthy lives. We hope that this article is helpful to other student-run free clinics who are looking to establish their presence on social media platforms and to incorporate community education into their clinic mission statements.

## What is the Integrative Medicine Clinic?

The Integrative Medicine Clinic is the first student-run free clinic of its kind and aims to provide

integrative care to the uninsured population of Tucson. Integrative medicine encompasses both traditional and alternative medicine to treat a wide range of ailments and incorporates preventative medicine with the goal of enhancing an individual's baseline health.<sup>5</sup> Some techniques that are used include meditation, supplements, dietary modifications, and certain exercises. These techniques are commonly used in preventative health as well in order to combat certain comorbidities such as obesity, hypertension, and heart disease.<sup>5</sup>

Part of the goal of integrative medicine is to empower patients to take control of their own health through the many modalities used to treat a variety of ailments.<sup>5</sup> For example, educating patients about following a healthy diet, like the Mediterranean diet, can be used to simultaneously treat inflammatory diseases and aid in weight loss, which can lead to a reduction in blood pressure.<sup>6</sup> This aspect of integrative medicine inspired the community education component of our clinic. Due to the limited frequency and capacity of our clinic, we would only be able to offer one-on-one consults to a couple patients per month; therefore, our education component was developed to expand our impact in the community.

### Importance of Community Education

Throughout our medical education, we are often taught about the importance of educating patients on their diagnosis and treatment in order to improve compliance. Another important role of the physician is to serve as a public health advocate that educates the community about preventative medicine. Many diseases that we treat, including hypertension, type II diabetes mellitus, and atherosclerosis, can be targeted before their onset by implementing lifestyle changes such as a healthy diet, exercise, and stress reduction.

Unfortunately, in today's society, there is a lot of misinformation on the internet about how to embody a healthy lifestyle. It is common to see advertisements for supplements and diets that will lead to dramatic weight loss. This kind of

information is not only misleading but can also be dangerous.<sup>7</sup> In addition, these modalities can be expensive which makes them inaccessible to the underserved community. As medical students, we have the knowledge and platform to provide reliable and easily accessible information about healthy living.

A challenge in providing community education is ensuring that the information is understandable and accessible. This requires the ability to transform complicated medical information into simplified terms that the general population will be able to understand and incorporate into their lives. As we brainstormed and developed our Instagram posts, we focused on producing useful and tangible content for our target audience. We also considered financial and geographic barriers present in our community, including limited access to healthy foods and spaces to exercise. For example, Arizona is above the national average for prevalence of food insecure homes at 13.1% compared to the national average of 12.3%.<sup>3</sup> In addition, people in underserved communities are less likely to hold a high school diploma, which highlights the importance of providing easy to understand educational material.<sup>3</sup> As we developed our posts, we made sure to include alternative options to accommodate the entire bandwidth of the community, such as providing free audio for a guided meditation.

### COVID-19 and Education

Prior to the start of COVID-19, our clinic planned on having monthly in-person education sessions where two student-educators would focus on one topic to be delivered in an interactive manner. Originally these were planned to be held in the lobby of the clinic during our monthly clinics. However, due to COVID-19, we decided to organize an online education session to be conducted via Zoom. Although we received five RSVP's for attendance, we did not have anyone show up to the event, causing us to rethink our approach to community education.

Due to the fact that we are a new student-run clinic, we were concerned that our reputation had not been established enough to encourage people to attend a one-hour live education session. In order to expand awareness and establish a reputation for our clinic in our Tucson community, we started an Instagram page. Our goal was to provide educational material in a simple and easily accessible manner to a large portion of the Tucson community. Although our target audience is the low-income Tucson population, we acknowledged that educating the community as a whole about their own health, while establishing a trusting and reliable reputation, was overall the best approach to targeting the needs of the community.

Our Instagram posts primarily have focused on sleep hygiene, immunity, and stress reduction, given the need for this information in the setting of COVID-19. Posts were constructed using peer-reviewed or expert sources and created through the free program called Canva. The goal of each post was to provide high-quality information about integrative medicine approaches that are inexpensive and easily accessible, using language that was understandable to the non-medical community. In addition, given the large Spanish-speaking population of Tucson, we translated many of our posts in order to promote inclusivity and to provide information to the majority of our population.

### Creating Educational Content

The foundational groundwork we used to create our Instagram posts was to find reputable content that is relevant to our audience. Our educational initiative focused on the intersection between integrative care, preventive medicine, and healthcare disparities within our community.

One approach we used was brainstorming a list of topics we wanted to address and then subsequently searching for topical material on UpToDate or PubMed. Another technique we found to be helpful was to locate reputable organizations that are already engaged in research on integrative medicine topics, which

then served as a resource to generate ideas for multiple new posts. For our clinic, we used websites such as the Greater Good Science Center and Dr. Andrew Weil’s website.<sup>8,9</sup> Additionally, since our mission is grounded in addressing health disparities within our community in Tucson, some of our upcoming posts will be grounded in publicizing nonprofit resources that would benefit uninsured members of Tucson, such as the 3000 Club, a nonprofit that provides local produce to community members.

Other free clinics will need to modify this content to make it relevant to their audiences, but perhaps some of the principles we have used will generate ideas for how to brainstorm a variety of useful resources to create content.

### Creating Aesthetically Pleasing Posts

In order to create a cohesive theme for an Instagram page, Canva offers a tutorial on the color wheel and color theory on their website. We selected four basic complementary shades for our individual posts, which together form a cohesive color scheme to visually unite the Instagram page. We also chose to coordinate certain fonts between our posts.

Figure 1. Color wheel on canva.com.

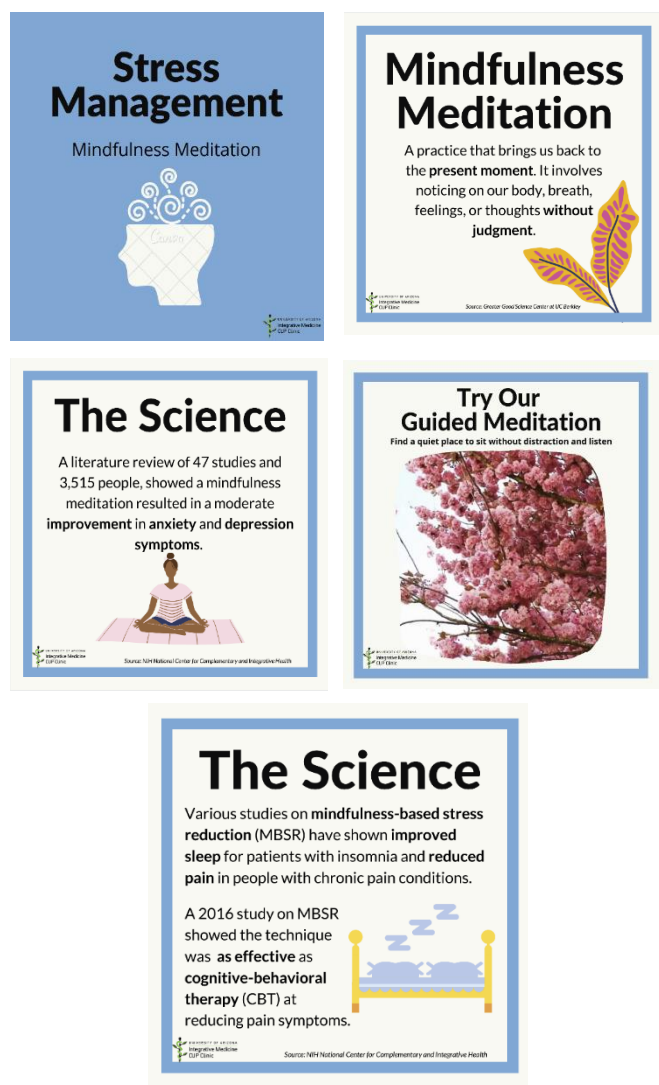


For a given post, we created a “visual hook” for the first page that invites the reader in and introduces the topic, using the Canva platform. We have the option to either choose a visual hook that is pre-made within Canva that fits within our chosen color scheme or to choose a modifiable color scheme. Then, we create additional pages that the viewer can swipe right on to view if they

are interested in reading more about a given topic. An example of one such post is illustrated below in **Figure 2**.

For the following pages, we typically use one of the free borders found under the Shapes section to frame the educational content and then change the color to coordinate with the title page. We then summarize the content we have researched briefly within these pages, focusing on key takeaways in a few sentences, italicizing key words and adding related images to make the content bite-sized, friendly, and inviting.

**Figure 2.** Examples of educational posts on Instagram [@uaintegrativecup](https://www.instagram.com/uaintegrativecup).



**Future Goals**

The main goal of the education aspect of our clinic is to provide high-quality information and advice to a large portion of the underserved population of Tucson through an easily accessible modality like Instagram. Currently, we have 113 followers, have published 11 posts, and have received as many as 27 likes per post. To reach as many people as possible, we plan to expand our community outreach efforts to communicate with local organizations that provide services to our target population. In addition to expanding our following, these community programs may provide feedback on our selected topics and drive the direction of our information to best benefit our target population.

Once we develop a more robust following, we plan to start Instagram live sessions to expand our education content. Due to our low community following, we have not been able to conduct any research on efficacy or impact of our social media posts; however, we believe that once we have established a reputation in the community, we will be able to conduct research to determine our impact as well as areas of improvement.

Another goal is to create templates and a framework that can be utilized by other medical students nationwide in order to implement a similar program at their school. Because our student-run free clinic is the first of its kind, we want to assist other schools in the development of either integrative medicine clinics or community education programs. In addition, we want to expand the concept that community education is an important part of preventative medicine and can be practiced by medical students. We also are using our Instagram page to network with other groups who share similar values.

Although initially difficult, the alterations we made to accommodate the realities of COVID-19 provided an opportunity to reach more of our community through a virtual platform. Using this modality will also enable us to share our findings with other medical students and to learn from other programs that may be pursuing the same

purpose. By using an online platform, such as Instagram, we are providing a reliable source of information to a large portion of our community about how they can use integrative medicine at home to improve their overall health and reduce the risk of developing comorbidities.

One limitation of using an online source is that we will miss the portion of the population that does not have access to the Internet or technological devices. As we continue to develop our online content, we plan to create an alternative modality that can be utilized by this specific population so that their lack of access does not contribute further to the health disparities that already exist in this community.

Student-run free clinics provide a great service to the community, and we hope that sharing our successes and failures will help other such clinics to expand their ability to educate and empower their local community.

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